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A MODEL HOUSING LAW

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A MODEL HOUSING LAW

By

LAWRENCE VEILLER

AUTHOR OF "HOUSING REFORM," "A MODEL TENEMENT
HOUSE LAW," ETC.

NEW YORK
SURVEY ASSOCIATES, INC.
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I
HOUSING REFORM
THROUGH LEGISLATION

HOUSING REFORM THROUGH LEGISLATION

TO the social reformer who believes that the solution of the housing problem is to be found in a change in methods of taxation or in a new industrial era this book will have but little interest.

How delightful it would be to be able to believe that all that is needed to bring about proper housing conditions is a change in the economic status of the working people! That given enough wages, slums would vanish! Flying carpets, wishing caps, and magic philters have from time immemorial had an indescribable charm for humanity. But alas, it is not to be done so easily. City slums cannot by the wave of a necromancer's wand become gardens of delight.

The determination of how best to cope with the housing problem depends a good deal upon one's conception of what housing reform is; and before there can be adequate discussion of what constitutes that there must be agreement as to what the housing problem is. In other words, we must know what we are going to reform before we attempt to reform it.

There is great variety of opinion on this subject, especially among those to whom it is a new subject. Some people seem to believe that the housing problem is essentially the problem of cheap houses; as they have expressed it, "of providing a home for the man who cannot afford to pay more than \$9.00 a month." But this is a singularly misleading and restricted view of a large and complicated question. It is but one aspect of it. It would be as appropriate to say that the problem of child welfare is the providing of milk at four cents a quart.

Another group, with their eyes fixed upon the more crowded quarters of some of the larger cities where the problem of moving back and forth the vast throngs who journey from one part of the

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city to another twice a day is fraught with great difficulties, conceive that the housing problem is the problem of rapid transit and that if cheap and effective rapid transit could be once provided the housing problem would be solved. This is not a new view.

Still another element believe that the housing problem is the problem of supplying a sufficient *quantity* of housing accommodations and that anything which tends to encourage the building of more houses will solve the housing problem, the assumption being that there is a dearth of housing accommodations and that people live under bad conditions simply because there are not enough houses to go around.

There is truth in all these views. Each one is a factor involved in the housing problem, but no one of them can be truthfully said to constitute that problem.

The housing problem is the problem of enabling the great mass of the people who want to live in decent surroundings and bring up their children under proper conditions to have such opportunities. It is also to a very large extent the problem of preventing other people who either do not care for decent conditions or are unable to achieve them from maintaining conditions which are a menace to their neighbors, to the community and to civilization.

If we accept this view of what constitutes the housing problem we see that it has many sides; that it is not only an economic problem, not only a question of supply and demand and of furnishing a sufficient quantity of homes, but that the *kind* of home is of vital importance. The assumption that thousands of people live under conditions such as are found in our large cities throughout America because there are no other places in which they can live is not borne out by the facts. There is no use in dodging the question. We may as well frankly admit that there is a considerable portion of our population who will live in any kind of abode that they can get irrespective of how unhygienic it may be.

Housing reform is to be sought in many ways, but chiefly through the enforcement of wise laws; laws which will regulate the kind of houses that may be built, will compel the improvement of the older buildings as they fall into disuse, and will require all buildings in which human beings live to be kept in a sanitary and safe condition.

HOUSING REFORM THROUGH LEGISLATION

But legislation is not the only way. Much must be done through education,—education of both tenant and landlord, and even of the community itself. The force of example some think will do much, but thus far that expectation has not been realized.

Considerable also can be accomplished by wise management; by the building of houses of a more attractive type; by encouraging the development of garden cities; by stimulating those who like country life to live in the country or in the suburbs; by improved transit, thus making it easier for men to live out of town and journey to their work; and especially by the intelligent planning of towns and cities.

But what makes any of us take up housing reform is not primarily the desire to see any of these things brought about, but the insistent demand made by our consciences for the abolition of the slum.

We all of us believe that the conditions under which thousands of our fellow citizens live are wrong and a mockery on civilization, and to many of us the continuance of such conditions seems fraught with menace to our institutions. That the people themselves often have created the very conditions from which they suffer does not alter the situation. The conditions are there and must be dealt with. The one thing that we are all agreed upon is that we cannot afford to neglect them.

The housing problem is therefore essentially the problem of preventing people from maintaining conditions which are a menace to their neighbors or to the community.

Housing evils as we know them today are to be found in dangerous and disease-breeding privy vaults, in lack of water supply, in dark rooms, in filthy and foul alleys, in damp cellars, in basement living rooms, in conditions of filth, in inadequate methods of disposal of waste, in fly-borne disease, in cramped and crowded quarters, in promiscuity, in lack of privacy, in buildings of undue height, in inadequate fire protection, in the crowding of buildings too close to each other, in the too intensive use of land.

How are these manifold evils to be remedied? Legislation thus far has proved to be the most effective remedy. The only way that we know of by which such conditions can be ended is through the enactment of laws which will compel the removal of

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these evils and the substitution of right conditions. This is not theory but the result of the experience of many cities.

Legislation alone, of course, will not do it. Laws must be enforced. Merely getting a housing law on the statute books will not change conditions. Unfortunately, laws do not execute themselves and no law will do much unless an adequate system of enforcement is also provided.

True, it is a painful operation. It takes time and energy and above all things patience. It means constant effort. It means attention to innumerable details. It often means foregoing immediate results to secure larger future returns.

Housing is a commodity like food or clothes, and the methods to be employed in securing the right kind of housing for the people of any community differ in no essential respect from the methods to be followed in providing the right kind of food or clothing for that community. In a city where the children of the poor were dying of typhoid because of impure milk, we should, I think, feel that it was trifling with a serious situation if it were urged that nothing could be done through legislation, but that the only way to insure a better milk supply was to encourage the people to move to the country where they could have their own cows and thus insure the right kind of milk for their children.

We should undoubtedly feel that it was playing with a vital situation were it proposed to meet a crisis of this kind through the establishment of a model dairy which would furnish milk to 1 per cent of the children of the city, and at the same time allow the other 99 per cent to be poisoned by bad milk. What every community has done under such circumstances has been to rise in its might and say bad milk shall not be sold. In other words, they have sought the remedy for such a condition through law and law enforcement, and they have gotten results. It is all right to establish a model dairy to encourage others and show how good milk can be produced, but this should follow an ordinance prohibiting the sale of skim milk or milk containing too large a bacterial count. No sane community would accept the establishment of one model dairy as a substitute for that kind of legislation. Good housing is to be provided in just the same way.

The question which every housing reformer must face is:

HOUSING REFORM THROUGH LEGISLATION

What method will give the largest results with the least expenditure of energy and effort? It is largely a question of emphasis. The method which will return 90 per cent of results and not 10 per cent, is obviously the method to follow. No one thing will in itself solve the housing problem in any community. Housing evils are of so manifold a nature and have so many manifestations that it is, of course, apparent that many things must be done before right conditions can be achieved. There is no method of housing reform which the housing reformer should not adopt provided it will produce results. It must always be submitted to this practical test. In some cases all methods are to be employed, not merely one.

That legislation alone will solve the housing problem is of course absurd. But the point that we wish to lay emphasis upon is that in most cases the largest results have come from legislative action and that until certain fundamental evils have been remedied it is futile, or worse, to adopt the methods of housing reform which may be said to belong to the post-graduate period rather than to the kindergarten stage of a community's development. In other words, we must get rid of our slums before we establish garden cities; we must stop people living in cellars before we concern ourselves with changes in methods of taxation; we must make it impossible for builders to build dark rooms in new houses before we urge the government to subsidize building; we must abolish privy vaults before we build model tenements. When these things have been done there is no question that effort can be profitably expended in the other directions mentioned.

II

BUILDING CODES, TENEMENT HOUSE LAWS AND HOUSING LAWS

II

BUILDING CODES, TENEMENT HOUSE LAWS AND HOUSING LAWS

IF we accept the principle that the largest results in housing reform will come through legislation, the immediate practical questions which present themselves are: What kind of laws shall we work for, how shall we prepare them and how obtain them?

As a rule, the first suggestion which comes to mind is to amend the building code. Every city of considerable size has a building ordinance of some kind and in those places where there is no building code it is very natural to concentrate effort upon securing one. While it is true that we do want to secure the enactment of laws which will regulate the way houses may be built, yet the remedies which most people interested in housing reform are seeking will not be found in the ordinary building code.

It is important, therefore, at the outset to clearly distinguish between three kinds of building laws—a building code, a tenement house law and a housing law.

A building code is, as its title indicates, a code of laws dealing with the methods to be employed in the construction of buildings. It concerns itself chiefly with questions of building materials and processes. Housing reformers are not as a rule interested in these questions; in the quality of brick and mortar, in methods of fire-proofing, in the advantages of terra cotta as compared with reinforced concrete, in factors of safety, in dead and live loads, in wind stresses, in automatic sprinklers, in fire and water tests, in rivets and flanges of iron beams and columns, in wall thicknesses and similar technical questions. Important as these are from the point of view of safety and construction and the reduction of fire risk, they do not touch the questions which most vitally concern the welfare of the great mass of our people.

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In other words, a building code does not so much affect living conditions as it affects the building industry. At best a building code is nothing more nor less than a gigantic specification. It is a document to interest architects and builders and manufacturers of building materials, not the housing reformer. As a rule, it is a long, detailed, abstruse, highly technical and uninteresting document, not understandable in most of its provisions by the layman.

Only in rare instances do we find in a building code provisions which deal with the conditions under which people live. Ordinarily no building code concerns itself with anything but the construction of new buildings. It is seldom that we find it dealing with the conditions which must be maintained in order that people may have sanitary homes.

It is apparent, therefore, that housing reformers will not find in the enactment of building codes the legislation which they are seeking.

The question then presents itself whether one should work for a tenement house law or for some other kind of a law. The answer to this question will depend very much upon the conditions which prevail in each city where the problem is taken up. In a city like New York, for instance, or Boston, or even Chicago, there are many reasons why housing reformers should seek at first at any rate to secure tenement house legislation. In these cities the tenement house is the type of dwelling in which the great mass of the people live. It is also the type in which the most serious evils are to be found. It is but natural under such circumstances that housing reformers should seek remedies for the worst conditions first.

Until very recently the course followed in America has been along these lines. Housing reform has been sought chiefly through tenement house legislation; that is, through laws which regulate the conditions in buildings in which many people live; and which deal not merely with the construction of such buildings when new, but also require the improvement of the older ones and the maintenance of all dwellings in a safe and sanitary condition.

Such laws are essentially different from building laws. They concern themselves primarily with sanitary questions—with

BUILDING CODES AND HOUSING LAWS

light and ventilation, plumbing and drainage, intensive use of land, privacy, sewage disposal, egress in case of fire, reasonable fire protection, and to a large extent with maintenance and use, regulating conditions under which water-closets are maintained, prohibiting improper use of cellars, regulating and restricting basement and cellar occupancy, providing for adequate water supply in convenient places, insuring cleanliness and the keeping of buildings in repair, providing receptacles for waste materials of various kinds, forbidding the keeping of animals and similar improper use of the premises; they require a resident caretaker, prohibit overcrowding, forbid the taking in of lodgers, authorize the health department to vacate houses which are unfit for habitation, and generally require buildings to be kept in sanitary condition.

It is at once seen that such a law is materially different from a building code and that it concerns itself with totally different things.

The question, What is a tenement house? presents some difficulties. In most cities the law includes in this category buildings which are occupied in common as the home or residence of three or more families. In a few cities the standard is set at four families, but in recent years it more properly has been set at two families. The city of Chicago, for instance, in its ordinance includes as tenement houses all buildings occupied by two families or more. The tenement house law of the state of Indiana similarly sets the standard at two families, though New York City still keeps its standard at three families. Columbus, Ohio, has gone further. It not only treats all two-family houses as tenement houses but includes under many of the provisions of the same law certain types of one-family houses as well.

There is, of course, no reason why people who live in houses in which there are but two families should not be afforded the same protection against unsanitary conditions that is afforded to people who live in houses in which there are three families. All are equally entitled to light and air, proper drainage, modern sanitation, adequate water supply and the rest of the things which go to make up proper housing conditions.

One reason why housing reformers have heretofore confined

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their efforts to tenement house legislation has been that they have necessarily in the beginning of this work, as a matter of policy, felt constrained to proceed along lines of least resistance and take up those conditions for which there would be the strongest public support.

Obviously, only in those cities where the tenement house is the prevailing type, will a tenement house law do much to solve the housing problem. In the great majority of cities, however, the tenement house is not the usual type but the exception. In most cities in America the great mass of the people live in one-family houses, many of them in detached houses; nevertheless, the housing evils which prevail there are the same evils that are found in the tenement houses of our larger cities.

Dark rooms, cellar dwellings, lack of drainage, inadequate water supply, overcrowding, the lodger evil, and the other countless evils encountered in our cities are found just as frequently in the small cottages in which the mass of the working people live as in the taller tenements of our older cities.

It is apparent, therefore, that housing reform to be effective must in most cities concern itself not merely with the tenement house but with the private dwelling.

There would be little difficulty in this were it not for the fact that any law which effectively regulates the dwelling in which the workingman lives must also apply to the mansion of the millionaire and the home of the average well-to-do citizen, who as a rule resents the idea that the house in which he lives needs regulation, and is consequently apt to oppose such efforts at housing reform.

The tenement house and the private dwelling are not the only types of buildings which need regulation. There are others which need it quite as much. It would seem that the time had come in America when we should regulate all buildings in which human beings live, and that it is folly for us any longer to permit dark rooms in any building where people dwell. A dark room in a boarding house or hotel is as dangerous as one in a tenement house; possibly in some ways more dangerous. Bad plumbing has the same bad effects in all buildings.

For these reasons the housing reformer should work for housing legislation; not merely for a tenement house law which in

BUILDING CODES AND HOUSING LAWS

most communities deals with one comparatively small and limited class, but for a law which affects all citizens, a law which makes dark rooms quite as impossible in the rich man's home as in the poor man's cottage, which makes a dark hall quite as illegal in a modern high-class, fireproof hotel as in a common lodging house.

The only kind of legislation that will do this is a law which affects all buildings in which people live, whether those buildings are private dwellings, two-family dwellings, tenement houses, apartment houses, flats, hotels, boarding houses, lodging houses, apartment hotels or bachelor apartments.

It is apparent that the scope of such a law is far wider than that of a mere tenement house law. The opposition to it will also be wider. And yet notwithstanding this, it is the kind of legislation to work for. By no other means can we secure right conditions.

It is, moreover, a rather restricted view to assume that one's duty as a good citizen is thus limited. It is also a short-sighted view; for it will only be a question of a few years when we shall have to take the second step if we do not take it now. And it is easier to make the advance in one step than in several. It is wise economy to make the momentum of the initial campaign carry through the broader law.

On the other hand, the term "tenement house" is an asset. One can rally to the support of tenement house reform a vast amount of public sentiment which will not respond in behalf of a mere housing law. The word immediately conjures up to the popular mind a picture of sordid, squalid conditions. When we hear of "tenement house reform" our minds instinctively revert to the city slum.

But it is also a liability. When applied to the high-class apartment house or to the better grade flat, to the private dwelling or the two-family house, there is resentment on the part of many members of the community whose support we should otherwise have, because they feel that a stigma is being attached to their property and their homes. They resent the idea of a tenement house law as applicable to the houses in which they live; for their conception of a tenement house is the popular one.

These advantages and disadvantages are both lost when we work for housing legislation. While it is true that the stigma

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attaching to the tenement house label disappears, on the other hand we shall extend the opposition to new groups.

I see no escape, however, from this dilemma. If the laws are to be of any value they must have "teeth in them" and someone is sure to be hurt. This is inherent in the situation and cannot be avoided.

If we wish, therefore, to make our efforts of the widest influence we should seek housing legislation and not merely tenement house reform. The latter will do for a few cities, but will prove of little value to the great mass of communities in America. Housing evils are not confined to cities. Slums are found wherever people live, in small towns, in villages, even on the open prairie, and the only effective way to overcome these evils is through housing legislation; legislation which at first should apply only to the larger cities, but which gradually can be extended with little change to the smaller communities until ultimately every section of the state is embraced within its beneficent protection.

III

HOW TO USE THE MODEL LAW

III

HOW TO USE THE MODEL LAW

WHILE this book is called A Model Housing Law it is so only in the sense of being a working model upon which others may build. It is in no sense meant to be an ideal or perfect statute. It perhaps can be best described as "canned legislation." Its purpose is to save persons interested in housing reform many years of effort, and if rightly used should accomplish this purpose. It is intended to make unnecessary the painful operation of collecting the housing laws of all the different cities and states throughout the country, preparing a comparative digest of them, and slowly and painfully setting to work to construct a new law from these elements, cutting a piece here and adding a patch there, the result being a crazy-quilt of legislation which does not accomplish what is desired.

As all the housing laws in the United States are based upon two models, either the New York Tenement House Law or the present author's Model Tenement House Law, published in 1910,* it at once appears that there is little advantage to any community in thus collecting the laws of the different states and cities. At best all that one can get from them is to discover the local variations that have been made from the parent stock.

As a rule these local variations hinder rather than help. They frequently mean nothing more than a concession made to some individual on a local committee who has in mind some particular type of house and who declines to agree to a report or to support proposed legislation unless the particular point which he has in mind is favored. Concessions of this kind when copied in other communities without an understanding of the reasons which led to their enactment, do incalculable harm.

* Veiller, Lawrence: A Model Tenement House Law. New York, Charities Publication Committee, 1910.

A MODEL HOUSING LAW

In A Model Tenement House Law, the disadvantages of this method of procedure are pointed out. It may not be amiss to repeat some of the warnings given there.

Writing a housing law is a difficult task. It requires much time and effort and a good deal of technical knowledge. As usually done it is undertaken by one or two public-spirited citizens who come to the task generally unprepared. Unless guided by the experience of others the results of this kind of effort are apt to prove disastrous. The law prepared under such methods is as a rule found inadequate when put into practice. It is then discovered that many important matters have been overlooked, that some parts have been so drawn as not to accomplish what was intended, that others are so involved that they are understood neither by the officials who have to enforce them nor by the citizens who are called upon to obey them, and that there are loopholes in the law by which it may be easily evaded and often its whole purpose defeated.

It is because of these considerations that the Model Law has been evolved.

All those enactments which any city would wish to make to regulate past, present and prospective housing evils have been included. It has been prepared for practical use by laymen, as well as by lawyers and public officials, and has been kept as simple and concise in form as it is possible to make it.

Housing laws deal with the construction of new buildings, the alteration of existing ones, and the maintenance of all, and are therefore used by many different classes in the community: builders, architects, plumbers, owners, tenants, social workers. In most laws, especially building codes, the provisions which relate to different classes of buildings are jumbled together and the person using them is compelled to hunt through the whole law to find that part in which he is interested.

In this respect the Model Law represents a great advance. The various provisions have here been so classified that each person can quickly and readily find those matters which interest him. A builder need only consider the provisions of one chapter of the law; namely, that relating to New Buildings. A man wishing to alter his house will find everything bearing on it in one separate chapter entitled Alterations; the landlord will find grouped to-

HOW TO USE THE MODEL LAW

gether under Maintenance in another chapter, all those provisions which govern the maintenance of such houses; and here too tenants and social workers will find what they want to know.

The law is accordingly divided into six chapters: Chapter I, General Provisions (including Definitions); Chapter II, New Buildings (divided into three divisions: Title 1, Light and Ventilation; Title 2, Sanitation; Title 3, Fire Protection); Chapter III, Alterations; Chapter IV, Maintenance; Chapter V, Improvements; and Chapter VI, Requirements and Remedies.

A special word of caution should be given in this connection. Some people have in their desire to "simplify" and reduce the bulk of the law because the law "looks so long" to them, sought to combine the various provisions and have disregarded this important plan of classification and thrown the various sections together. In every case where this has been done the result has been disastrous. The law thus evolved has been not only complicated and troublesome but has failed to remedy the evils involved.

Those seeking housing reform should realize at once that there is no way to enact a short housing law which will be adequate. There is no escape. If the conditions are to be adequately dealt with, the housing law must deal with all the important phases of the problem. No short cuts are possible.

A housing law to be appropriate should necessarily be adapted to local conditions. What is necessary and practicable in one city may not be necessary in another. In order to make such local adaptation easy, the plan has been adopted of printing in capital letters those standards which may vary in each city; thus, in the provision dealing with the percentage of lot which may be occupied, in the Model Law this has been fixed at SEVENTY per cent in the case, for instance, of interior lots not over 60 feet in depth. Some cities may wish to impose either a higher or a lower standard, to make this amount say 60 or 75; all that each city needs to do under the scheme of this law is to change the one word "SEVENTY" and leave the rest of the section as it is. The convenience of such a plan is obvious.

Where there is no featuring of a standard in this way it means that the requirement as written is deemed right for every city and should be enacted without change.

A MODEL HOUSING LAW

Too much emphasis cannot be placed upon adhering *strictly* to the phraseology and punctuation employed in the Model Law. Efforts should not be made to "improve" or "simplify" it. Every word, every comma has been weighed and has its exact and definite meaning. Many of the provisions have stood the test of many years' enforcement and interpretation.

Following each section of the Model Law will be found copious notes and illustrative diagrams. While it is true that there are few sections of the law to which such notes are not appended, yet the plan has been to make no unnecessary comment but only to discuss those points which experience has shown are likely to give rise to difficulty and concerning which those using the law should be fully informed. The notes are in the form of a running commentary on each section, pointing out where there is any doubt the reasons which have caused its enactment and what is intended to be accomplished by it; also calling attention to ways in which its meaning may be misinterpreted and explaining wherever necessary to the lay mind all technical points involved.

Similarly, the illustrative diagrams which accompany the text are employed where it is felt that without them what is intended will not otherwise be plain, especially to persons not familiar with the technical aspects of the problems involved. These diagrams will be more useful to the layman than to the architect or builder, but will it is hoped prove useful even to them.

To persons especially familiar with the technical details of housing laws many of these notes may seem superfluous, but it should be remembered that the Model Law will necessarily be used by many persons who do not have this technical equipment.

In addition to these explanatory notes it has been thought wise to build "a flight of steps" both up and down from each of the more important sections. In other words, while each section of the Model Law represents the best consensus of opinion as to what it is desirable and practicable to adopt, it is recognized that it will not always be possible for each city to enact every provision as written in the law. Concessions will necessarily have to be made to meet the views of various persons in each community, and it is important, therefore, for the housing reformer who is working for this result to know where he may safely make conces-

sions and how far it is wise to go. In order to aid him to the greatest possible extent a flight of steps has been built leading down from each section. In other words, where concessions can be made a series of "Concessions" is indicated after the explanatory notes, and the exact phraseology of each concession is given.

On the other hand, it is also recognized that in many cities it may be possible to adopt higher standards than those established in the Model Law. There are many sections in which undoubtedly it would be wise if higher standards could be adopted. A flight of steps upward has therefore similarly been erected from each section and a series of "Variations" appended to those sections where it is believed that higher standards can be adopted. Here, too, the exact form of each variation is given in precise terms so as to aid those using the law to the greatest degree.

Equipped in this way, thus prepared to make the law stronger or weaker as may be necessary in each locality, it is believed that the housing reformer will be furnished with a complete armory of weapons with which to wage his fight.

Recognizing that there may be communities in which it is the part of wisdom to confine one's efforts to the securing of a tenement house law and not attempt to get a housing law, the reader will find in Chapter VII a Model Tenement House Law, so that if a decision is reached to limit the legislation to multiple dwellings of this class, the housing reformer will find there in precise form all those changes in the housing law which it will be necessary to make to have it become a tenement house law.

This book would not be complete without a consideration, also, of what may be termed an Ideal Housing Law so far as light and ventilation are concerned. The author has no illusions on this subject and does not believe that it will be practicable to secure in America, with our constitutional limitations, a law of this kind, but feels it only appropriate to include in this book a suggestion indicating the direction in which an ideal housing law is to be sought.

A word of caution to those using the Model Housing Law.

There is a subtle temptation in the form of local pride which sometimes makes a group of housing reformers desire to have the law they draft seem more essentially their own. A distaste for

A MODEL HOUSING LAW

“copying” and an exaggerated desire for individual expression lead them to change for the sake of changing, to fix other standards because they are theirs.

The result of this course has generally proved to be disastrous. The profitable course to pursue is the direct reverse. Every person who is using the Model Law as the basis of his legislation should approach it with the idea in mind that as few changes as possible should be made, and only those for which affirmative evidence can be presented.

The burden of proof is on him for every change or departure made from the standards therein established. His conception of his work should be to try and have the Model Law enacted in his community with the fewest possible changes, and no change should be made for which there are not strong and cogent reasons.

IV
A MODEL HOUSING
LAW

AN ACT¹

In relation to the housing of the people in cities of the FIRST class.^{2,3}

NOTE 1: The title is purposely made broad and emphasis placed on the human or social purposes of the act thus strengthening it as an exercise of police power. This is wiser than to make it "an act in relation to the construction, alteration and use of buildings," with emphasis on buildings rather than on people.

Explana-
tion

NOTE 2: If local conditions permit and it is feasible to have the act apply to all cities of the state rather than to a few, it is of course better to give it this wider application. In some states this is necessary under the constitution. In such case care must be taken to provide adequate machinery for the enforcement of the act; this often does not exist. (See section 153.) If this change is desired the following variation is suggested:

VARIATION 1: "An act in relation to the housing of the people IN CITIES."

Variation

NOTE 3: The ideal condition is to have a housing law apply to all classes of buildings used as the residence of human beings, whether located in the country or in the city. Recent investigations show that conditions exist in many villages and on the prairies that are as bad in some respects as those to be found in the slums of large cities. A dark room is equally bad everywhere. If the law is given this wider application, great care must be taken to see that all its provisions appropriately apply to the simpler conditions which prevail in rural, semi-rural and suburban communities. For example, the requirement of section 45 for water-closets would be inappropriate in the country where there is no communal water supply. Similarly, in rural districts the provisions of sections 99 and 100 relative to cisterns, wells and

Explana-
tion

catch-basins are essential, but they are not appropriate for cities. The greatest difficulty in giving the law such general application is the lack of means of enforcing it in sparsely settled communities, and the cost of any system of inspection that will insure the maintenance of sanitary conditions. If this change is desired the following variation is suggested:

Variation

VARIATION 2: "An act in relation to the housing OF THE PEOPLE."

It is Advised: To have the act apply at first to the larger cities, then after it has been tried out and put into successful operation for two or three years, to extend its application to the smaller cities, and later to all parts of the state.

*The People of the State of ,
represented in Senate and Assembly, do enact as follows:*

Explanation

NOTE: The enacting clause will vary in different states; it should be made to conform strictly to the form locally in use.

ARTICLE I

GENERAL PROVISIONS

SECTION 1. SHORT TITLE AND APPLICATION.¹ This act shall be known as the housing law for FIRST class cities and shall apply to the FIRST class cities of the state.²

Explanation

NOTE 1: The purpose of this provision is to make it easy to cite the act in subsequent statutes and legal proceedings without the necessity of repeating each time a long title with the chapter number of the act and the various amendatory acts. In some states this method of citation is not permitted. The question of the scope or application of the act has already been fully discussed under the Title.

NOTE 2: If either of the variations discussed under

the Title is adopted, that one of the following variations which corresponds will also have to be adopted.

VARIATION 1: "This act shall be known as the City Housing Law and shall apply to all cities in the state." **Variation**

NOTE 2: Fully discussed under "Title," note 2.

VARIATION 2: "This act shall be known as the Housing Law and shall apply to all cities, towns and villages." **Variation**

NOTE 3: Discussed under "Title," note 3.

§ 2. DEFINITIONS.¹ Certain words in this act are defined for the purposes² thereof as follows. Words used in the present tense include the future; words in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural the singular; the word "person" includes a corporation as well as a natural person.

NOTE 1: There is danger in definitions. One must be closely on one's guard. The tendency of the uninitiated is to try to define everything. This is both unnecessary and unwise. We are not writing a dictionary but a law. Every definition is a source of potential danger. If not skilfully or carefully drawn it may defeat the entire purpose of the act. It may not only fail to include all cases that should be included, but it is more likely to err in permitting evasion of the law on technicalities, through lack of precision. The result is disastrous in either case. No definition should be included that is not absolutely necessary nor any term defined that is not used in the act. Where words have a commonly accepted meaning, and it is not desired to change that meaning, they should not be defined. It is sometimes safer to leave some things undefined, as it affords greater opportunity for successful argument in support of the act in subsequent litigation. It is neither necessary nor desirable to define such words as "apartment," "story," "building," "street," "alley," "lot," and so forth. It will be found that all definitions neces-

Explanation

sary to a proper housing law have been included. None can be added without danger.

NOTE 2: The phrase "for the purposes thereof" is of importance; otherwise the act will have a wider effect than is intended. To impose the limitations of these definitions upon the operation of other statutes would of course be unwise. For example, in New York state, the housing law defines a hotel as one having at least 50 sleeping rooms, whereas the excise law requires but 10 sleeping rooms. Under the excise law hotels with 10 rooms are given certain privileges as to the sale of liquor; these would be taken away from every hotel that did not have 50 rooms, were not the definition in the housing law limited to "for the purposes of this act."

§ 2 (1) DWELLING. A "dwelling" is any house or building or portion thereof which is occupied in whole or in part as the home, residence or sleeping place of one or more human beings, either permanently or transiently.

Explan-
ation

NOTE: This is a *housing* law; that is, it deals with buildings in which people *live*. It does not attempt to deal with places where people only work or assemble. It might very well be called a dwelling house law. Its provisions therefore relate to all dwellings, though some relate only to certain kinds of dwellings. The definition of dwelling is made as all-inclusive as possible. The determining factor is the sleeping place of the individual. As the act applies to all dwellings and includes the mansion of the millionaire and the modern high-class hotel as well as the cottage and tenement of the humble wage-earner, it must be drawn with the greatest care. Herein lies the greatest point of difficulty in the whole subject. Provisions which are at once admitted to be necessary for the protection of the poor tenement dweller, are resented by the rich or well-to-do member of the community, who thinks no law is necessary for him, and is often unable to see that in order that the community may be protected, laws must be general in their application, and that occasionally the individual must of necessity be restricted in greater or less degree.

§ 2 (2) CLASSES OF DWELLINGS.¹ For the purposes of

this act dwellings are divided into the following classes:

- (a) "private-dwellings," (b) "two-family-dwellings," and
- (c) "multiple-dwellings":²

(a) A "private-dwelling" is a dwelling occupied by but one family alone.³

(b) A "two-family-dwelling" is a dwelling occupied by but two families alone.³

(c) A "multiple-dwelling"^{2,4} is a dwelling occupied otherwise than as a private-dwelling or two-family-dwelling.

NOTE 1: The whole scheme of the law is to be found in the plan of classification herein embodied. Especial care has been taken to differentiate the three classes, private dwellings, two-family houses, and multiple dwellings of various kinds, thus permitting differentiation in the provisions relative to each class. That such differentiation is necessary is obvious. Provisions necessary for safety in large tenement houses or in tall hotels are not so necessary in small two-story private dwellings. Practically all of the provisions of the act with reference to fire protection will be found to apply only to multiple dwellings (sections 51 to 62 inclusive). Similarly, other provisions proper for the maintenance of tenement houses are not so necessary in private dwellings. (See sections 90 and 91.) Many of the provisions of the act apply to all classes of dwellings; some apply only to multiple dwellings and a few only to one class of multiple dwelling. By means of this plan of classification it is possible to encourage the construction of private dwellings and two-family houses and to discourage the erection of tenement houses and other forms of multiple dwellings by making the provisions relative to the latter more stringent than those affecting the former classes. We are, moreover, on safe ground from a legal point of view in adopting this method of restriction, whereas we should not be if, for example, we attempted a definite prohibition against the erection of tenement houses. To impose more stringent requirements, in case of fire for instance, on tenement houses occupied by many families than on private dwellings, would unquestionably be maintained by the courts as a reasonable discrim-

Explana-
tion

ination. The effect of these more stringent requirements in increasing the cost of construction may, however, so discourage the construction of buildings of this kind as to practically stop their erection.

NOTE 2: A great advantage of this scheme of classification is that it removes any stigma that may seem to attach to the word "tenement house." Because of the prevailing conception of such buildings, resulting from the use of the term in its popular rather than its legal meaning, there is often great objection on the part of owners and occupants of high-class apartment houses or costly mansions to have to comply with the terms of a "tenement house law"; when there would be little or no objection to compliance with a "housing law" which affects all buildings used for residence purposes.

NOTE 3: The word "alone" in (a) and (b) while seemingly unnecessary is essential. It will not do to let a small boarding house "occupied by but one family"—and several non-related individuals, as boarders—be classed as a private dwelling and thus escape the provisions of the act relative to multiple dwellings.

NOTE 4: It should be observed that no kind of dwelling can escape regulation under the act. For every dwelling that is not either a private dwelling (a) or a two-family dwelling (b) becomes under the act a multiple dwelling. Multiple dwellings are "all others."

§ 2 (3) CLASSES OF MULTIPLE-DWELLINGS.¹ All multiple-dwellings are dwellings² and for the purposes of this act are divided into two classes, viz. Class A and Class B:

Class A. Multiple-dwellings of Class A are dwellings which are occupied more or less permanently for residence purposes by several families and in which the rooms are occupied in apartments, suites or groups. This class includes tenement houses,³ flats, apartment houses, apartment hotels, bachelor apartments, studio apartments, duplex apartments, kitchenette apartments, and all other dwellings similarly occupied whether specifically enumerated herein or not.⁴

Class B. Multiple-dwellings of Class B are dwellings

which are occupied, as a rule transiently, as the more or less temporary abiding place of individuals who are lodged, with or without meals, and in which as a rule the rooms are occupied singly. This class includes hotels, lodging houses, boarding houses, furnished-room houses, lodgings, club houses, convents, asylums, hospitals, jails, and all other dwellings similarly occupied whether specifically enumerated herein or not.

NOTE 1: Multiple dwellings are divided into two broad classes; those which are used by families or groups of persons *permanently* as their home or place of residence, and those which are used more or less *transiently* by single individuals. The first class includes tenement houses, flats, apartment houses and similar types of buildings; the second class includes hotels, lodging houses, boarding houses and similar buildings. Some provisions of the act apply to one of these classes, other provisions to the other, while many provisions apply to both. Such differentiation is obviously necessary. To illustrate: in a tenement house it is appropriate to require each fire-escape balcony or other means of egress to open directly from each apartment, suite, or group of rooms; in the case of a hotel such a provision would be "impossible."

Explan-
ation

NOTE 2: While it is repetition to say "all multiple dwellings are dwellings" inasmuch as a multiple dwelling has been defined in subdivision (2) (c) as "a dwelling," still it is wise to repeat it here so that there can be no question in the minds of the enforcing officials or of the courts that multiple dwellings must comply with the provisions of the act relative to dwellings.

NOTE 3: It is to be noted that the enumeration of the various kinds of multiple dwellings in Class A and Class B is in no way essential to the definition. The definition is complete without it. It is included solely to guide the enforcing officials and to illustrate to them and to the public what is meant. This enumeration will also aid those who draft the law by enabling them to consider whether each provision that applies to dwellings and to multiple dwellings can be properly applied to each of the kinds of buildings herein mentioned.

NOTE 4: The phrase "and all other dwellings simi-

larly occupied whether specifically enumerated herein or not," is essential. All enumerations in statutes are dangerous unless safeguarded in this way by some general "drag-net" clause, as it may easily happen that there are other kinds of multiple dwelling than those stated which may have been forgotten at the time of drawing the act, to say nothing of those which may come into existence subsequently.

§ 2 (4) HOTEL. A "hotel" is a multiple-dwelling of Class B in which persons are lodged for hire and in which there are more than fifty sleeping rooms, a public dining room for the accommodation of at least fifty guests, and a general kitchen.

**Explan-
ation**

NOTE: This definition is made necessary by the fact that "hotels" may be exempted from certain provisions of the act. (See sections 21 and 71.) The exemptions in question are advisable, if at all, only in the case of the tall modern hotel with accommodations for many guests, generally several hundred. It is to prevent these exemptions from applying to other kinds of building that this definition becomes necessary. Without it, the exemptions would apply to any building known as a hotel under any law, or even to a building popularly so known; now they will apply only to such buildings as are covered by this definition.

§ 2 (5) FAMILY. A "family" is a group of persons living together, whether related to each other by birth or not, and may consist of one or more persons.

**Explan-
ation**

NOTE: This definition is only for the purposes of this act. It is made necessary because otherwise, two brothers living together, or two friends, or mother and daughter, or a father alone though keeping house in an apartment of eight or nine rooms, might not constitute a "family," in the eyes of the court.

At first blush it seems rather strange that one person should constitute "a family," but this is necessary from a legal point of view. The term "family" as employed in this law really means domicile; this latter term might be used in place of family were it

not for the uncertainty with which it might be regarded legally, not having been subject to construction to any great extent. It will be seen, therefore, that under this definition a family means any separate domicile in a house, whether one person lives there or several, and whether those several people are related by birth or not.

§ 2 (6) MIXED OCCUPANCY. In cases of mixed occupancy where a building is occupied in part as a dwelling the part so occupied shall be deemed a dwelling for the purposes of this act and shall comply with the provisions thereof relative to dwellings.

NOTE: Without this provision, we might have the anomalous situation of an office building or public school building being brought under the requirements of the act because the janitor and his family live there, and thus the building is "occupied . . . in part as the home * * * of one or more human beings." It is obvious that the provisions of this law which relate to dwellings should not apply to a building occupied chiefly as an office building, or public school, but should apply only to the parts of such buildings which are used for dwelling purposes.

Explanation

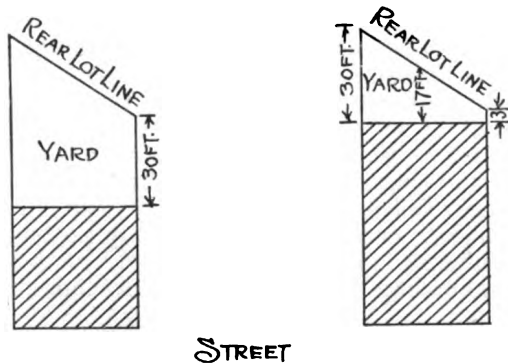
§ 2 (7) YARDS. A "rear yard" is an open unoccupied space on the same lot¹ with a dwelling, between the extreme rear line of the lot and the extreme rear line of the house.² A yard between the front line of the house and the front line of the lot is a "front yard."³ A yard between the side line of the house and the side line of the lot and which extends from the front line or front yard to the rear line of the lot or to the rear yard is a "side yard."⁴

NOTE 1: The words "on the same lot" are important. In many communities it has become the custom to build buildings close to the side and rear lot lines, sometimes on the line, having the rooms on that side or end of the house secure their sole light and ventilation from windows opening on the adjoining premises which have been left unbuilt upon at these points.

Explanation

This is not safe. When the adjoining premises are later built upon, as they are sure to be ultimately, the light and air are then shut off, with the result that a number of dark or semi-dark rooms are created. It is impossible then to remedy the conditions adequately. The evils of "borrowed light" are too great to be safely permitted. Nor is it fair to permit one man to use another man's land for such purposes. The only safe and proper way is to require each person to leave proper open spaces on his own lot for the adequate lighting and ventilation of his own building.

NOTE 2: The phrase "between the extreme rear line of the lot and the extreme rear line of the house" is necessary for two reasons. One of these is the con-



STREET

FIGURE 1

siderable number of irregular-shaped lots with rear boundary lines running at an angle as shown in Figure 1.

Without this phrase, the plan of leaving a clear open space at the rear of each building of a certain minimum size would be defeated. Let us assume, for instance, that the yard required to be left by law is 30 feet; if this phrase were not included, the yard could be left as shown in the right-hand diagram, instead of the full amount intended, as illustrated by the left-hand diagram. It is at once seen that in the first instance a very inadequate yard might result; namely, a yard only 3 feet deep at one point and but 17 feet deep at another and of varying

depths between, instead of 30 feet deep at every point.

Similarly, without the phrase in question the law could be easily evaded in the case of lots of varying depth as shown in Figure 2.

What the law intends to require, namely, a clear space of 30 feet at every point, is shown by the left-hand diagram; what could be done, if no specific provision made it impossible, is illustrated by the right-hand diagram. It is at once seen that it would be possible to have no yard at all for one-half of the building with the house at that point built all the way up to the lot line, thus creating dark rooms and

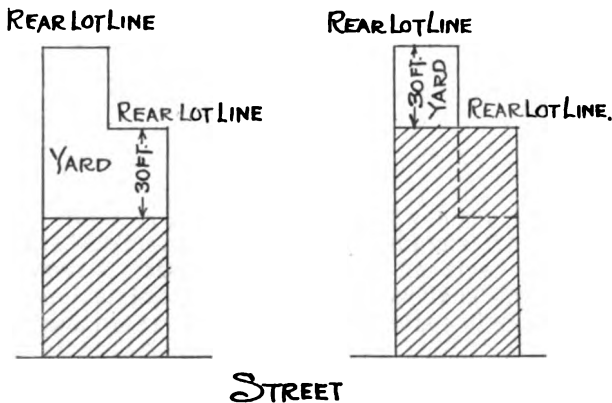


FIGURE 2

defeating one of the primary purposes of the act. The dotted lines show what should be left.

The second class of cases which makes the phrase under discussion of importance is where the building instead of the lot, is of irregular depth, owing to the construction of extensions or the use of courts as shown on page 38 (Figures 3 and 4).

Here the law intends that the measurement of the rear yard shall be as shown in the left-hand diagram. Without the phrase "the extreme rear line of the house," it would be possible to build as shown in the right-hand diagram, thus defeating the primary purpose of this provision; namely, the leaving of an adequate open space at the rear.

Similarly, where courts are employed at the rear of the building there is equal opportunity for misunderstanding and evasion, as shown in Figure 4.

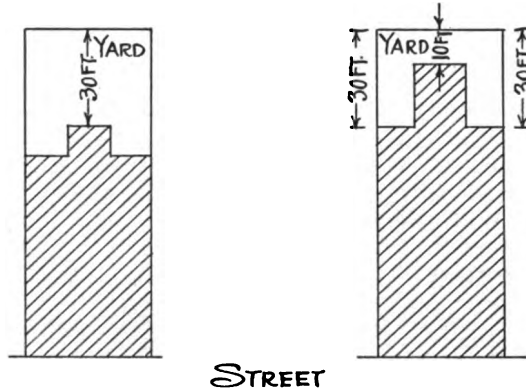


FIGURE 3

Here again what the law intends is shown in the left-hand diagram; what would be possible in evading the law, were not this point safeguarded, is shown by the right-hand one. This whole question assumes importance in connection with sections 22, 29 and 72.

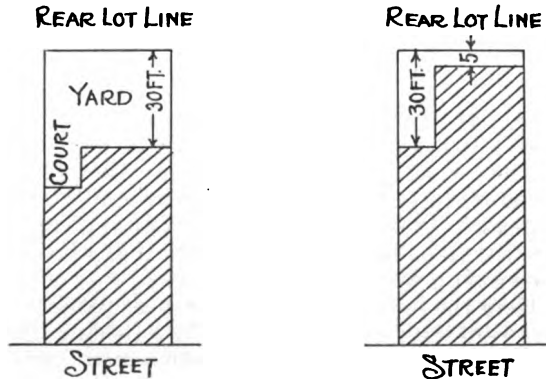


FIGURE 4

NOTE 3: It is necessary to define front yards, as

otherwise they would under the definition of "courts" be treated as such and be subject to the requirements relative thereto. This would bring about the absurd situation that a man who wished to set back his house from the street line and leave a large front yard, voluntarily leaving more open space than the law requires, could not under some circumstances do so without being unduly penalized. (See section 24.)

NOTE 4: "Side yards" which extend through from the street to the yard, *if of sufficient width*, are an excellent feature and should be encouraged as a much better kind of open space than courts. If they do not extend through, however, their especial value is lost and they become courts and should be treated as such and be required to be of greater width.

§ 2 (8) COURTS.² A "court" is an open unoccupied space, other than a yard, on the same lot¹ with a dwelling. A court not extending to the street or front or rear yard is an inner court. A court extending to the street or front or rear yard is an outer court.

NOTE 1: The comments under note 1 on Yards, section 2 (7) apply equally here. Explana-
tion

NOTE 2: The scheme of the law contemplates only two kinds of open spaces; namely, yards and courts. Yards may be rear yards, side yards or front yards, as above defined. All other open spaces are "courts." Shafts (small enclosed courts) are ruled out. The term is one whose use should be discouraged. Courts are essentially of two kinds; namely, inner and outer. In the former the open space is enclosed by walls on all four sides (in some cases on three sides with the lot line acting as the fourth, but ultimately to be enclosed); in these courts all the light must come in over the top of the walls at the roof, and all the air in the same way unless other means of circulation is provided. Outer courts have always one end or side left open; namely, that adjacent to the rear yard, street or front yard, and are never enclosed on more than three sides (sometimes only on two sides, with the lot line acting as the third side). The light and air can therefore stream in through the open side. The following sketches show the main types of inner and outer courts. (Figures 5, 6 and 7.)

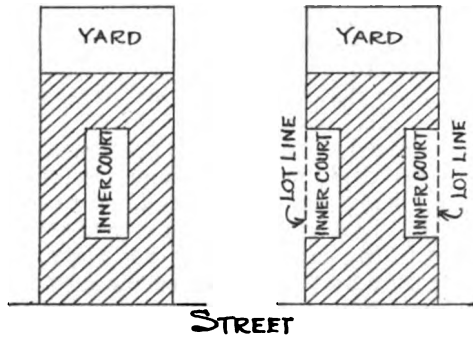


FIGURE 5
INNER COURTS

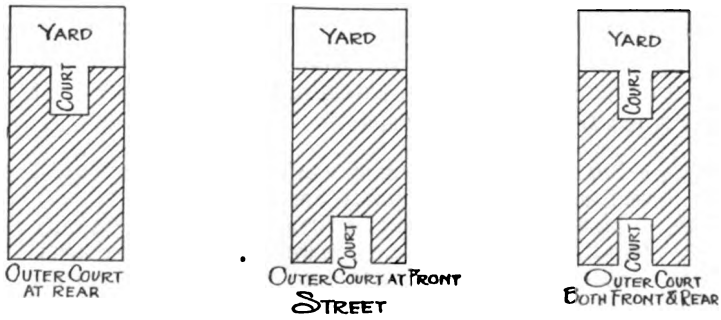


FIGURE 6
OUTER COURTS BETWEEN WINGS

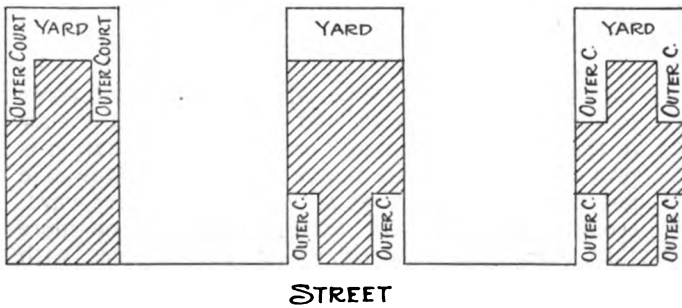


FIGURE 7
OUTER COURTS ON THE LOT LINE

§ 2 (9) CORNER AND INTERIOR LOTS. A "corner lot" is a lot situated at the junction of two or more intersecting streets. A lot other than a corner lot is an "interior lot."

NOTE: As buildings on corner lots secure much more liberal treatment in the percentage of lot which may be occupied and also may have smaller yards than those on interior lots, this definition is necessary. Interior lots are "all others." In some cities a third type is recognized, namely, "through lots," or those that extend through from one street to a parallel street. These are purposely not included here, as this type of construction is one that should not be permitted. It is not necessary in any city except in the closely built up business districts where it is considered desirable to utilize every inch of space, and where frequently it becomes necessary to have a large amount of continuous unbroken floor space. In residence districts these conditions do not exist. This method of building should be strongly discouraged even for business buildings, as it destroys any plan for block ventilation and violates some of the most elementary principles of intelligent city planning.

Explan-
ation

§ 2 (10) FRONT; REAR; AND DEPTH¹ OF LOT. The front of a lot is that boundary line which borders on the street. In the case of a corner lot the owner may elect by statement on his plans either street boundary line as the front.² The rear³ of a lot is the side opposite to the front. In the case of a triangular or gore lot the rear is the boundary line not bordering on a street. The depth of a lot is the dimension measured from the front of the lot to the extreme rear line of the lot. In the case of irregular-shaped lots the mean depth shall be taken.

NOTE 1: This definition would be unnecessary were it not for the triangular-shaped lots which border on three streets, in relation to which the question of where the yard is to be left becomes a doubtful one. Some ingenious architects and owners have sought to induce the public officials in such cases to rule that one of the streets is the "yard," thus permitting more of the lot to be occupied. To prevent this evasion

Explan-
ation

of the law this definition is necessary. The following diagram illustrates the point at issue.

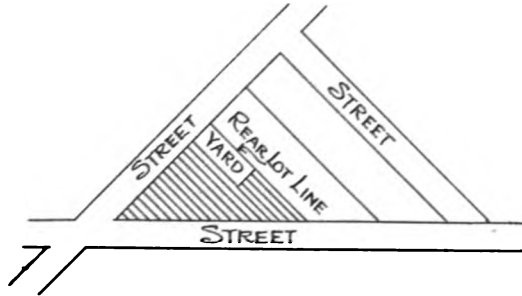


FIGURE 8

NOTE 2: It is wise to be liberal in the case of a corner lot and leave the owner free to place his entrance on either street frontage which may best suit his purpose, instead of attempting, as is done in some building codes, to lay down the hard and fast rule that the narrower frontage shall always be the front. There is nothing to be gained by this and it might work hardship in some cases. It should be noted that the entrance is not necessarily on the front; it may be on the side. This is important, as there are often local neighborhood reasons for having the entrance on one street rather than another.

NOTE 3: In cases where the end of the building faces the street, doubt has arisen as to where the yard should be left. The definition clarifies this point. (See Figure 9.)

The front is at A, the rear at B. It has been claimed that the front is at C, and the rear at D because the entrance to the house is at C, and that the yard should be left along the line D D. Such a construction is absurd and would be prohibitive. The definition makes such an interpretation impossible.

§ 2 (11),(12),(13) GENERAL PROVISIONS

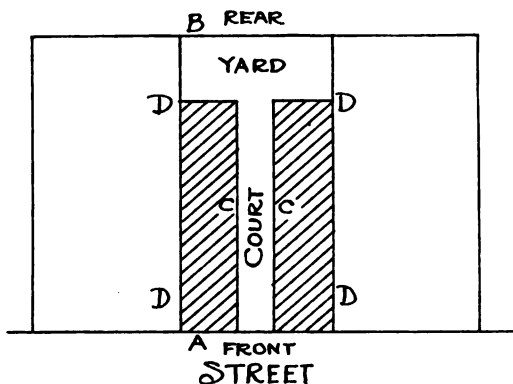


FIGURE 9

§ 2 (11) PUBLIC HALL. A "public hall" is a hall, corridor or passageway not within the exclusive control of one family.

NOTE: It should be noted that under this definition there are no "public halls" in a private dwelling, and that therefore the requirements of the act relative to public halls will not apply to such houses. This will also be the case in the usual type of two-family house, where separate hallways and entrances are provided for each family.

Explanation

§ 2 (12) STAIR HALL. A "stair hall" is a public hall and includes the stairs, stair landings and those portions of the building through which it is necessary to pass in going between the entrance floor and the roof.

NOTE: It should be noted that a stair hall is by this definition specifically declared to be a public hall, and therefore is subject to the requirements of the act relative to public halls.

Explanation

§ 2 (13) BASEMENT; CELLAR; ATTIC.¹ (a) A "basement" is a story partly underground but having at least one-half of its height above the curb level, and also one-half of its height above the highest level of the adjoining ground.² A basement shall be counted as a story.³

(b) A "cellar" is a story having more than one-half of its height below the curb level, or below the highest level

of the adjoining ground.² A cellar shall not be counted as a story for purposes of height measurement.³ If any part of a story is in that part the equivalent of a basement or cellar, the provisions of this act relative to basements and cellars shall apply to such part⁴ of said story.

(c) In the case of private-dwellings and two-family-dwellings an attic, or story in a sloping roof, if not occupied for living purposes shall not be counted as a story; in the case of multiple-dwellings an attic shall be counted as a story.⁵

Explanation

NOTE 1: There is much misunderstanding in the popular mind as to basements and cellars with a strong tendency to lump all underground rooms together in one objectionable class. This is neither fair nor wise. The two are quite different. Many basement rooms are fit for habitation; few cellar ones are. It should be borne in mind that a basement is a story which is in even the slightest degree below the ground. Some basements have their floors but a step or two below the sidewalk and are practically the equivalent of first floor rooms; to prohibit the occupancy of such rooms would obviously be unreasonable. Wherever the line is drawn it necessarily is a more or less arbitrary one, and a good case can be made out, at least on paper, against the "unreasonableness" of a requirement which permits the occupancy of a room whose ceiling is 4 feet 6 inches above ground, and forbids the use of an identical room whose ceiling is but 4 feet 5 inches above it. This argument applies to all cases where definite fixed standards are established; the man who falls just one side or the other will seem to be discriminated against. But these are chiefly arguments of the "enemy" for the purpose of discrediting the law. There are no real obstacles involved. As such standards apply to future construction it is quite easy for the individual to adapt himself to them without loss or hardship. The standard here established of half the height of the room above ground is the standard which has been in use for fifty years past. As it has proved satisfactory in that time and given no trouble it is continued.

NOTE 2: The most difficult question involved in the definition of basement and cellar is its adaptation

to the varying conditions which exist in hilly communities. Here one may have a story that is a cellar in the front of the building, and a basement, or entirely above ground, at the rear, and vice versa. In such cases it would be unfair to prohibit the occupancy of rooms at the rear which are entirely above ground and meet all the requirements of the law in other respects. On the other hand, it is not wise to permit a builder to have his buildings one story higher in the rear than in the front through the simple expedient of excavating his land at the back part of his lot and carrying his yards and courts down, thus putting a whole story of his building below ground and below the level of neighboring property. (See Figure 10.) There is no city where underground living is

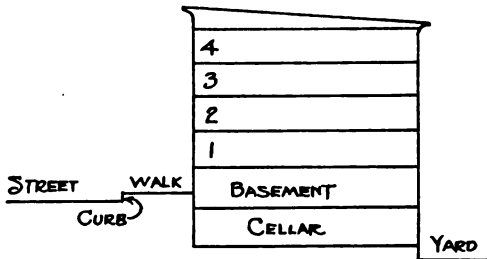


FIGURE 10

a necessity. It is obviously undesirable. The definitions have been framed with the most minute care with these considerations in mind. It should be noted that in the case of basements a double condition is imposed (and similarly with cellars); namely, the ceiling must be one-half of its height above *both* the *curb* in front of the building and *also* above the *highest level* of the *adjoining ground*. This takes care of the conditions above described and illustrated in Figures 10 and 11. These show "sections through"—not plans.

Figure 10 illustrates the case where the land is higher in the front than at the rear, either naturally so, or because the rear is excavated. The rear rooms in this cellar are entirely above ground and are fit for occupancy. The front ones are not. Figure 11 illus-

trates the opposite case where the land is higher at the rear than at the front. Here the basement is fit for occupancy in the front part but not in the rear. If it were not for the double condition imposed by the definition requiring the height to be not only above the curb level but also above the highest level of the adjoining ground, it would be possible to have these objectionable rooms occupied in each case.

NOTE 3: "A basement shall be counted as a story, a cellar shall not be so counted." This at first sight seems unfair. Upon reflection it is found essential, as otherwise the plan for restricting the height of non-fireproof buildings to three stories could be easily evaded. Thus a man could build a three story and "basement" building, making the "basement" floor a few inches below the entrance level; by this means he

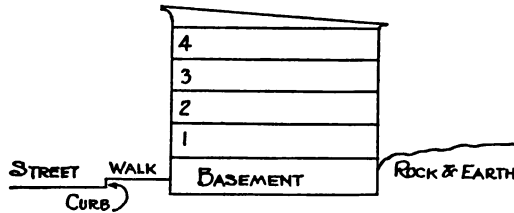


FIGURE 11

could get four full stories thus defeating the purpose of the act to keep non-fireproof houses down to three stories. (See section 50.)

NOTE 4: The considerations which have been set forth so fully in note 2 indicate the necessity of treating the different parts of a cellar or basement, or even of an upper story, separately, where there are varying conditions of grade. (See Figures 10 and 11.) Each portion should be treated on its merits.

NOTE 5: The above questions are important in connection with sections 24, 29, 40, 41, 50, and 94.

NOTE 6: Attics present some difficulties. Where they are built there is danger that at some future time they will be lived in, and they are as a rule not fit for living purposes, especially in multiple dwellings. It would be simpler to rule them out but this is not practicable. People do not want all houses to be flat-

roofed houses, and in private dwellings and two-family houses the peaked roof is the rule rather than the exception. Also there is a desire and need for the storage space thus afforded. There is, however, no such necessity for attics in multiple dwellings; the arrangement of the building changes that. This subject is important in connection with sections 22, 23, 24 and 50.

§ 2 (14) HEIGHT. The "height" of a dwelling is the perpendicular distance measured in a straight line from the curb level to the highest point of the roof beams in the case of flat roofs, and to the average of the height of the gable in the case of pitched roofs, the measurements in all cases to be taken through the center of the front of the house. Where a dwelling is situated on a terrace above the curb level such height shall be measured from the level of the adjoining ground. Where a dwelling is on a corner lot and there is more than one grade or level, the measurements shall be taken through the center of the front on the street having the lowest elevation.

NOTE: Where there are two grades, pressure will be brought to bear to have the measurements of height taken from the higher level rather than the lower, thus permitting a higher building. In some cases, depending on the steepness of the grade, this might result in non-fireproof buildings three stories high at one point and four or five stories high throughout most of the building, thus defeating the purpose of the law to keep non-fireproof buildings down to three stories. (See section 50.)

Explanation

§ 2 (15) CURB LEVEL. The "curb level" is the level of the established curb in front of the building measured at the center of such front. Where no curb has been established the health officer shall establish such curb level or its equivalent for the purposes of this act.

NOTE: It will not do to let each irresponsible builder or owner fix the curb at such point as will best suit his purposes; this should be done by some re-

Explanation

sponsible public official. As the curb level is thus fixed only "for the purposes of this act," to enable the enforcing official to determine measurement of height and the conditions of occupancy of basement rooms, the health officer is the best person to designate for this purpose. If under the local charter or other law some other official like the city engineer is given such functions, it can do no harm to let that official establish the curb level, if it is so desired.

§ 2 (16) OCCUPIED SPACES. Outside stairways, fire escapes, fire towers, porches,¹ platforms, balconies, boiler flues and other projections² shall be considered as part of the building and not as part of the yards or courts or unoccupied area.

Explanation

NOTE 1: It is hardly debatable that the minimum open spaces left unbuilt upon for light and air should be left entirely unoccupied. A court or yard filled up with fire-escapes will prove of little value for light and ventilation. Some difficulties will be encountered, however, in the case of porches. In the smaller cities the back porch as well as the front porch is an institution, and even the side porch in the case of the detached house is much desired, especially in "double-houses." In such cases it is wise to permit these, but safeguarded as indicated in concession 1. Add at the end of the first sentence after "unoccupied area" the following:

Concession

CONCESSION 1: "This provision shall not apply to unenclosed outside porches not exceeding one story in height which do not extend into the front or rear yard a greater distance than ten feet from the front or rear wall of the building; nor to one such porch which does not extend into the side yard a greater distance than SIX feet from the side wall of the building nor exceed TWELVE feet in its other horizontal dimension."

Explanation

NOTE 2: Cornices are also troublesome. Where the house has a peaked roof there is sure to be an overhanging cornice. This will do little harm at the front or rear but if not safeguarded will do great harm

in completely shutting light and air out of the side yard. It is not uncommon to see two overhanging cornices of adjoining houses meeting over the side yards completely closing them in at the top and effectually shutting out a large part of the light. The limit of projection established in concession 2 is the absolute limit. Add at the end of the section the following:

CONCESSION 2: "Cornices which project into an outer court or into a side yard for a distance of more than eighteen inches, shall similarly be considered as part of the building. A cornice which projects into an inner court to any extent shall be considered as part of the building."

Concession

§ 2 (17) FIREPROOF DWELLING.¹ A "fireproof dwelling" is one the walls of which are constructed of brick, stone, cement, iron or other hard incombustible material and in which there are no wood beams or lintels and in which the floors, roofs, stair halls and public halls are built entirely of brick, stone, cement, iron or other hard incombustible material and in which no woodwork or other inflammable material is used in any of the partitions, furrings or ceilings. But this definition shall not be construed as prohibiting elsewhere than in the public halls the use of wooden flooring² on top of the fireproof floors or the use of wooden sleepers, nor as prohibiting wooden handrails or treads of hard wood not less than two inches thick.

NOTE 1: This is the standard definition of a "fireproof building" found in most building codes. It does not correspond to what may be termed the *extra-fireproof building*, in which it is required that all doors, windows, window frames, and trim shall be of metal and the use of wood anywhere is prohibited. Heretofore this extra-fireproof construction has not been thought necessary except in the case of buildings exceeding 150 feet in height. As this law does not contemplate the erection of any building over 100 feet in height, the matter of extra safeguards may safely be left to the local building code.

Explanation

NOTE 2: Under this definition it should be noted that in "fireproof dwellings" ordinary wooden floors

A MODEL HOUSING LAW § 2 (18), (19), (20)

may be used as a carpet or finish on top of a structural floor of strictly fireproof material; but not in the public halls, which include the stair halls.

§ 2 (18) WOODEN BUILDING. A "wooden building" is a building of which the exterior walls or a portion thereof are of wood. Court walls are exterior walls.

§ 2 (19) NUISANCE. The word "nuisance" shall be held to embrace public nuisance as known at common law or in equity jurisprudence; and whatever is dangerous to human life or detrimental to health; whatever dwelling is overcrowded with occupants or is not provided with adequate ingress and egress to or from the same, or is not sufficiently supported, ventilated, sewerred, drained, cleaned or lighted, in reference to its intended or actual use; and whatever renders the air or human food or drink unwholesome, are also severally, in contemplation of this act, nuisances; and all such nuisances are hereby declared illegal.

Explanation

- NOTE: The common law right of every community to abate nuisances exists from time immemorial. The broadening of the definition as herein indicated, therefore, greatly increases the powers of the local officials and may prove a very valuable weapon if other powers granted under this act should be lost through the successful action of hostile interests. (See sections 112, 113.)
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§ 2 (20) CONSTRUCTION OF CERTAIN WORDS.¹ The word "shall"² is always mandatory and not directory, and denotes that the dwelling shall be maintained³ in all respects according to the mandate as long as it continues to be a dwelling. Wherever the words "charter," "ordinances," "regulations," "superintendent of buildings," "health department," "health officer," "department charged with the enforcement of this act," "commissioner of public safety," "corporation counsel," "mayor," "city treasury," or "fire limits" occur in this act they shall be construed as if followed by the words "of the city in which

the dwelling is situated.”⁴ “Superintendent of buildings”⁵ means that public official charged with the enforcement of the laws in relation to the construction of buildings. Wherever the words “occupied” or “used”⁶ are employed in this act such words shall be construed as if followed by the words “or is intended, arranged, designed, built, altered, converted to, rented, leased, let or hired out, to be occupied or used.” Wherever the words “dwelling,” “two-family-dwelling,” “multiple-dwelling,” “building,” “house,” “premises,” or “lot” are used in this act, they shall be construed as if followed by the words, “or any part thereof.”⁷ Wherever the word “street” is used in this act it shall be construed as including any public alley⁸ SIXTEEN feet or more in width. “Approved fire-proof material” means approved by the superintendent of buildings.

NOTE 1: The purpose of this section is to simplify the language of the act wherever possible and avoid the necessity of constantly repeating a mass of verbiage in order to insure precision and prevent evasion of the law. What is done here enables us to “clear the decks” generally. Explana-
tion

NOTE 2: In some cases the word “shall” has been held by the courts to mean “may.” The effect of such a construction is to make vitally important sections of the law which should be mandatory and should be enforced in *all* cases, enforceable only in the discretion of the enforcing officials. This defeats the purposes of the act and encourages graft and favoritism. For further discussion of the abuse of discretionary power see Housing Reform, pages 90-94.*

NOTE 3: The phrase “the dwelling shall be maintained in all respects according to the mandate as long as it continues to be a dwelling” has the effect of preventing the subsequent alteration of the building otherwise than in accordance with the law.

NOTE 4: If the application of the act is limited to one city, this sentence should be omitted.

NOTE 5: In some cities there is no superintendent

* Housing Reform. By Lawrence Veiller. Russell Sage Foundation Publication. New York, Charities Publication Committee, 1910.

of buildings, or inspector of buildings; it is therefore necessary to provide for that contingency by permitting the mayor to designate the fire marshal, or fire chief, or police chief or some other appropriate person. Add after "the construction of buildings" the following:

Variation

VARIATION 1: "Where there is no such official, the mayor shall designate someone so to act for the purposes of this act."

Explanation

NOTE 6: This is vitally important; without it the whole law can be made of no avail. In the case of new buildings, an architect or builder could refuse to comply with the law on the ground that his building was not *occupied* by three families—being occupied by no one, not yet being built, and therefore did not come under the definition of a multiple dwelling. This is not a fanciful view, though it may seem so; there have been cities where this has been done and where friendly public officials have acquiesced in such an interpretation. The phrase "or is intended, arranged, designed, built, altered, converted" covers this loophole.

Similarly in some cities where occupancy by three families constitutes a building a tenement house, owners have adopted the device of temporarily putting out one family and then claiming that the building is not a tenement house as it is then occupied by only two families. This has been successful even where the building is a three-story one with three separate apartments in it and clearly arranged for occupancy by three separate families. The phrase "arranged, built, altered, converted to, rented, leased, let or hired out to be occupied" covers this loophole.

NOTE 7: Without this provision the law could be easily evaded. All that an owner would need to do to escape compliance with the law would be to have his building an "office" building, or "loft," or some other type of building and use part of it as a dwelling or multiple dwelling.

NOTE 8: In cities where there are alleys it is necessary to treat the larger ones that are public thoroughfares as streets. What the dividing line between street and alley is it is hard to say, but width and pub-

lic ownership rather than private ownership are two determining factors at least. By means of this clause it is made impossible to erect tall dwellings on narrow alleys, as they must be treated as streets and the height of the building limited to the width of the alley. (See section 21.) This clause also has an important bearing on sections 26, 29, 35, 36, 46, 71, and 120. Without it, it would not be lawful to use an alley 16 feet wide as a means of light and ventilation. It is obvious that this should be permitted. It should be noted that only a *public* alley is to be deemed a street, that is, one of which the city owns the fee; this is eminently fair, as private alleys can be closed or abandoned and thus lose their value as a permanent source of light and ventilation. The determination of how narrow an alley should be recognized as a lawful source of light and ventilation will necessarily vary in each city, depending on the custom or prevailing width in that city. The standard in the law should harmonize with the prevailing local conditions so far as practicable.

§ 3. BUILDINGS CONVERTED OR ALTERED. A building not a dwelling if hereafter converted or altered to such use shall thereupon become subject to all the provisions of this act relative to dwellings hereafter erected. A dwelling of one class if hereafter altered or converted to another class shall thereupon become subject to all the provisions of this act relative to such class.

NOTE : Without this provision the law can be completely evaded by erecting all new buildings in the guise of "alterations" to existing buildings. In a wellknown Eastern city a few years ago when there was a somewhat drastic tenement house law on the statute books affecting only new construction, it happened that for a period of several years few new houses were built. Upon inquiry it developed that all building operations were "alterations." Plans would be filed for the "alteration" of an existing building; one portion of the building would be left standing while the new work was going on in another portion, and then the remaining portion would be torn down and the new work extended there until a

Explan-
ation

completely new building was erected, without compliance with the law, as the law did not apply to alterations.

Irrespective of these considerations, it is obvious that it would be both unfair and unwise to permit the alteration of existing buildings to a changed use without enforcing compliance with the terms of the act applicable to new buildings, as the effect of such a policy would necessarily be to prevent the construction of new houses, thus perpetuating the evils of the older buildings and indefinitely extending their lease of life.

§ 4. ALTERATIONS AND CHANGE IN OCCUPANCY.¹ No dwelling hereafter erected shall at any time be altered so as to be in violation of any provision of this act. And no dwelling erected prior to the passage of this act shall at any time be altered so as to be in violation of those provisions of this act applicable to such dwelling. If any dwelling or any part thereof is occupied by more families than provided in this act, or is erected, altered or occupied contrary to law,² such dwelling shall be deemed an unlawful structure, and the health officer may cause such dwelling to be vacated. And such dwelling shall not again be occupied until it or its occupation, as the case may be, has been made to conform to the law.

**Explan-
ation**

NOTE 1: This section should be read with care. It distinguishes between two kinds of dwellings; namely, those erected under the terms of the act, and those erected before its passage. It is obvious that it should not be possible to erect a new dwelling in compliance with the act and then a few years later alter it contrary to its requirements. If this were possible the law would not be worth much. In the case of dwellings erected before its passage, on the other hand, it would be unreasonable to forbid the alteration of such a building unless it complied with the requirements applicable to new ones. The effect of such a requirement would be to stop all improvement to the older buildings. What this section does is to prohibit the alteration of such a building so as to be at variance with the provisions rela-

tive to such buildings only and not to new buildings; namely, Articles III, IV, and V. To illustrate, an existing dwelling built some years prior to the passage of the law might occupy 80 per cent of the lot, and it might be desired to alter this building in the interior, rearranging partitions, throwing several small dark rooms into one large lighter room, and thus greatly improving the conditions, but not extending the building, nor increasing the percentage of the lot occupied. Such an improvement should of course be permitted, but would not be possible if the law prohibited the alteration of an existing building except in conformity with the provisions of the act relative to new dwellings, as is required in some carelessly drawn building codes. On the other hand, it should not be possible to create new dark rooms in an old building, where none were before. Both these points are safeguarded in this section.

NOTE 2: The special proviso as to change in occupancy is necessary because of the fact that the use and character of a building may be completely changed without any structural alteration whatever, merely by changed occupancy; without such a provision some courts have had a tendency to construe the law narrowly and hold that change in use is not alteration.

§ 5. DWELLINGS MOVED. If any dwelling be hereafter moved from one lot to another it shall thereupon be made to conform to all the provisions of this act relative to dwellings hereafter erected.

NOTE: An ingenious way of beating the law has been employed in some cities by moving an old building from one location to a lot that was before vacant, thus putting a new building where no building was before; as such building was not one "hereafter erected or altered," the law did not apply. This section prevents this method of evasion.

Explanation

§ 6. MINIMUM REQUIREMENTS;¹ LAW NOT TO BE MODIFIED. The provisions of this act shall be held to be the minimum requirements adopted for the protection of the health, welfare and safety of the community.³ The local

legislative body of each city is hereby empowered to enact from time to time supplementary ordinances imposing requirements higher² than the minimum requirements laid down in this act, relative to light, ventilation, sanitation, fire prevention, egress, occupancy, maintenance and use, for all dwellings. And such local legislative body is hereby further empowered to prescribe for the enforcement of the aforesaid supplementary ordinances remedies⁴ and penalties similar to those prescribed in this act. But no ordinance, regulation, ruling or decision of any municipal body, board, officer or authority shall repeal, amend, modify or dispense with any of the said minimum requirements⁶ laid down in this act.⁵

Explanation

NOTE 1: This "Home Rule" provision of the act is a vitally important one in its different bearings. In the first place, it effectively silences opposition to the act raised by special interests who are adversely affected by its provisions and who, as an effective means of choking off all legislation, seek to raise the "Home Rule issue"; namely, objection to the passage of a statute on this subject as distinguished from a local ordinance.* No one is able to advance any argument against the propriety of the state's embodying in the fundamental law the *minimum* requirements necessary for the protection of the "health, welfare and safety of the community," especially when at the same time a liberal grant of power is given to each community to enact supplementary ordinances on this subject.

NOTE 2: The method herein employed also becomes at times the only practical way of harmonizing the conflicting standards of different cities in the same state where a provision of law that is acceptable to one city is felt to be too drastic by another city in which certain evils have become more firmly entrenched or where land values are higher or pressure of population greater. Standards can accordingly be set at a level that will satisfy all concerned and the cities which wish higher standards are free to adopt them by means of local ordinances.

* For discussion of the advantages of a state law as against a local ordinance, see Housing Reform, pp. 151-153.

NOTE 3: The declaration of the fundamental purposes of the act as an exercise of the police power of the state, embodied in the first sentence of this section, should prove helpful in litigation in the event of the constitutionality of the act being challenged.

NOTE 4: It is necessary to grant specifically to the local authorities the right to prescribe certain penalties and remedies for the enforcement of the supplementary ordinances, otherwise these ordinances may not be effective. A board of aldermen has not *ipso facto* the right to provide for injunction proceedings, proceedings *in rem*, and so forth. Unless otherwise provided by statute, a violation of a corporation ordinance is liable to be a "violation of an ordinance" and no more, punishable only by a small fine.

NOTE 5: The most important part of this section, in fact of the whole act, is found in the last sentence, which seeks to prevent the misuse of discretionary power. There is little use in working out with minute care the standards to be observed to secure adequate light and ventilation, proper sanitation or safety in case of fire, if some local official has the power at any time to set aside or modify at his pleasure these essential requirements. In many cities boards of appeal exist in connection with the department of buildings, who exercise the power to modify and set aside the law in particular cases. Under the terms of this section no one, neither board nor official, will have such power so far as this law is concerned. This is as it should be. Under no other method can we have proper law enforcement. Every citizen has a right to know that he is being treated on the same basis as everyone else and that no one can receive special privileges, and especially to know clearly what the law is and what can be done and what cannot be done.* If the law is wrong the thing to do is to amend it, whether it be a statute or an ordinance; not give to some administrative officer the power to set the law aside. Such a scheme undermines the basic principles upon which the government of this country rests. It will not do in this instance any more than it will in others to confuse the legislative, judicial and administrative functions. The laws

* For discussion of the abuse of discretionary power, see Housing Reform, pp. 90-94.

should be made by the legislature, not by the superintendent of buildings.

NOTE 6: It should be noted that the power given to the local authorities is to impose higher or stricter standards, and that they are expressly prohibited from lowering the standards embodied in the act. If such an attempt is made, as it is likely to be, such an ordinance in the face of this provision would be null and void.

§ 7. SEWER CONNECTIONS AND WATER SUPPLY.¹ The provisions of this act with reference to sewer connections and water supply shall be deemed to apply only where connection with a public sewer and with public water mains is or becomes² reasonably accessible. All questions of the practicability of such sewer and water connections shall be decided by the health officer.

**Explan-
ation**

NOTE 1: It is, of course, impracticable to require running water where there is no city water, or to require the installation of water-closets where there are neither water nor sewers. There are, however, cases where, while there is no sewer in the street in front of the house, it is possible to connect to a public sewer a few blocks distant by means of a private sewer. The question of whether this is practicable or not should in all cases be determined by the responsible public official, not by the property owner whose "pocket nerve" may be unduly sensitive.

NOTE 2: The two words "or becomes" are important. At the time a house is built there may be no sewer adjacent to which connection can be made and therefore a privy must be tolerated. A year later a sewer is extended to that neighborhood. The health officer should be free under these circumstances to order the privy removed, modern conveniences installed, and the house connected to the street sewer. Without those two words he would not have that power.

NOTE 3: The importance of this section is to be observed in connection with sections 44, 45, 46, 47, 93, 98, 99, 100, and 124.

§ 8. STATE BOARD OF HEALTH. The state board of health shall have power to examine into the enforcement

of this act in each city. Whenever required by the governor it shall make such an examination and shall report the results thereof to the governor within the time prescribed by him.

NOTE: This is a wholesome check on local boards of health and may prove to be useful where it is difficult to secure proper law enforcement. It is a power to hold in reserve and use only as a last resort.

Explanation

§ 9. RESIDENCE DISTRICTS.¹ Whenever the owners of record of two-thirds or more of the linear frontage of one side² or street-frontage of any block shall by written petition to the common council duly signed and acknowledged, ask that such side or street-frontage of said block be designated as a "residence district," and the common council shall approve of such petition, such side or street-frontage of said block shall thereupon become a "residence district," and shall continue to be such until such time as a like petition asking that such side or street-frontage of said block cease to be a "residence district" shall be presented to the common council and be approved by them. Except as otherwise provided in section twenty-eight, no building other than a private-dwelling or two-family-dwelling³ or a building used by the city, state or nation for public purposes⁴ shall hereafter be erected or altered or converted to be so occupied on any lot abutting on such street-frontage so long as it continues to be a "residence district," except upon the written consent of the owners aforesaid. Such written consents shall be filed in the health department and shall be public records. A "block" for the purposes of this section is a property division containing one or many lots and bounded by three or more streets.⁵

NOTE 1: This is somewhat novel in American practice. It is an attempt to protect residence districts from the invasion of commercial and other non-residence uses. The novel feature is that it is

Explanation

done by statute rather than by covenant. It is an attempt, therefore, to apply to America the European practice of establishing by regulation various districts or zones for different purposes, which is so vital a feature of most intelligent schemes of city planning. The plan which has been developed is believed to be especially applicable to American conditions. Its chief points are:

1. The request for restriction of use arises with the owners of the major part (two-thirds) of the property affected by the restriction.

2. It provides for a hearing before the local legislative body, thus giving every citizen his day in court, and requires the approval of the local authorities before the scheme becomes effective.

3. It provides a flexible scheme by which the restrictions can be removed at any time by the same method under which they were originally established.

4. It offers further great flexibility in the fact that notwithstanding the establishment of a given residence district, buildings of the class prohibited under the law can be erected at any time even in that district if the consents of the owners of two-thirds of the property affected are secured.

5. It makes the unit one side of a block thus limiting the area of "betterment" or depreciation to reasonable limits.

6. It does not stand in the way of the commercial development of the city or even of a neighborhood in view of the smallness of the unit adopted. It permits business on one side of a street, residences on the other.

7. It excludes from within a residence district those classes of buildings which can be readily shown to be objectionable to the occupants of a residence district and to affect adversely property values.

NOTE 2: The diagram on page 61 (Figure 12) shows how the plan would work out.

Taking the block A B C D, let us assume that three sides AB, BC and CD are established as "residence districts"; the remaining side AD, located on an avenue where business has already got a strong foothold and where business buildings are the only practical development, is not made a residence district.

NOTE 3: It is to be noted that under this section everything is excluded from a residence district ex-

cept private dwellings and two-family houses and certain rear buildings on the back of the lot used in connection with them, as private garages, stables, and so forth. (See section 28.) But no public garage or public stable, no apartment house or tenement house, no factory, loft, office building, store or shop, hotel or church can be erected there without the consent of two-thirds of the owners affected.

NOTE 4: It has been thought necessary to make an exception and permit the erection of such public buildings as schools, police stations, and so forth, as otherwise their erection might in some cases be objected

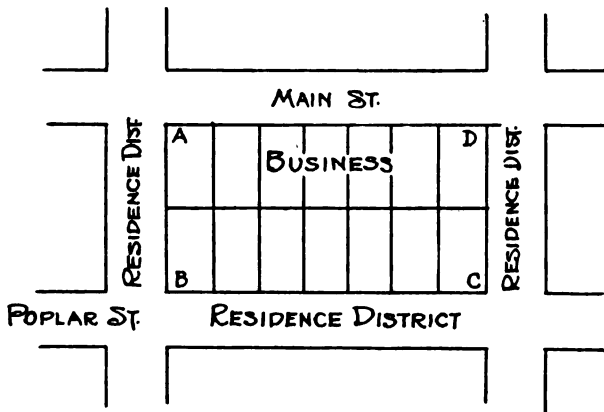


FIGURE 12

to and the city be prevented from locating them in the most advantageous places.

NOTE 5: Attempts along somewhat similar lines have been made recently in a number of cities and states. These attempts have not in all cases followed closely the lines laid down here but have been defective in one or two important respects. It is believed that the points to which exception has been taken in these cases have been fully met in the proposed section of this law and that if this section is tested and properly defended it will be sustained by the courts as a reasonable exercise of the police power. The more important attempts that have been made to bring about this result along somewhat parallel lines are as follows:

New York. A provision identical with section 9 of the Model Housing Law was embodied in the housing law for second class cities passed by the New York legislature in 1913 (chapter 774 of the laws of 1913). This act affects the following cities: Albany, Schenectady, Syracuse, Troy, Utica and Yonkers. Action under this section has already been taken in several instances by the Common Council of the city of Utica and also in the city of Syracuse. No attempt has as yet been made to test it.

California. The city of Los Angeles was the pioneer in this movement. Here in 1909 the first districting ordinance in America was enacted. Since that time this ordinance has been amended more than 70 times through the adoption of additional districts. The Los Angeles ordinance differs in many respects from the districting plans which have been carried out in other cities, in that it lays most emphasis upon the establishment of industrial districts, whereas most of the other cities concern themselves with residential districts. The entire city of Los Angeles with the exception of two suburbs is divided into industrial and residential districts. Part of Los Angeles is divided into 25 industrial districts and one residential district. In addition to industrial districts there are "residence exceptions"; in other words, small spots where certain unobjectionable industries are allowed. The industrial districts vary in shape and size. The largest has an area of several square miles and measures five miles in length and two miles in width. The smallest district comprises a single lot. As a whole, the industrial districts are grouped in one part of the city. The "residence exceptions" are small. The largest is about a half mile square and excepting this no "residence exception" covers a greater area than two city blocks. In many instances each district does not occupy more than one or two lots.

The line of demarcation between the industrial districts and the residential districts is that all kinds of business and manufacturing are permitted unrestrained in the industrial districts while in the residential districts certain specified businesses of a distinctly objectionable nature are prohibited. All industries not prohibited are permitted. In the residential districts all but the lightest manufacturing

is forbidden. But the less offensive business and manufacturing establishments which are excluded from the residential districts may be carried on in the "residence exceptions." The consent of the owners of 60 per cent of the neighboring property frontage is requisite to the creation of any "residence exception."

The distinctive feature of the Los Angeles scheme is that certain industries, even if already established in the residential district before the district is created, are to be excluded; that is, it is unlawful to maintain these industries even though they may have been in operation before the district was created. The industries which it is unlawful to carry on in the residential districts are: Any works or factory using power other than animal power in its operation; or any stone-crusher or rolling mill, machine shop, planing mill, carpet beating establishment, hay barn, wood yard, lumber yard, public laundry, wash house, coal yard, briquette yard, riding academy, or any winery or place where wine or brandy is made or manufactured.

The constitutionality of this scheme has been tested in the California courts in three cases and these decisions have great importance for the entire country. The first case was the case of *ex parte Quong Wo* (161 Cal. 220; 118 Pac. Rep. 714). After the city had been districted, over 100 Chinese and Japanese laundries found themselves in the residential district. The city immediately undertook to remove them to the industrial districts. A test case was brought in the case of a Chinaman, Quong Wo, before a police judge and the ordinance was upheld and the defendant required to pay a fine of \$100 or serve a sentence of 100 days in jail. Quong Wo appealed to the Appellate Court on *habeas corpus* and lost. He then carried his case to the Supreme Court of California, where the ordinance was sustained (in 1911). The court in its decision took a very broad view of police power and laid down principles which will be invaluable to every other city in America in dealing with this problem.

Two other cases were subsequently brought. One the case of *ex parte Montgomery* (163 Cal. 457; 125 Pac. Rep. 1070). This case involved the right of ejecting a lumber yard from the residential district. It also went to the

Supreme Court and the ordinance was again sustained (August 6, 1912), on similar grounds to the principles laid down in the *Quong Wo* case. Here again will be found a decision vitally important to all other American cities.

The third decision was had by the same court in *ex parte Hadacheck* (132 Pac. Rep. 589), decided May 15, 1913, where the Supreme Court again sustained the constitutionality of industrial and residential districts. In this case the petitioner owned a brick yard in the residential district and had acquired the land for this purpose in 1902 before the territory in which the district was located had been annexed to the city of Los Angeles. The case was especially favorable to the petitioner in that the land contained valuable deposits of clay suitable to the manufacture of bricks and was more valuable for brick making than for any other purpose. It was alleged also that the owner had through the entire period of his ownership used the land for this purpose and had erected on it the kilns, machinery, and so forth, necessary for such manufacture. Notwithstanding these circumstances, the Supreme Court ejected the brick yard from the residential district and stated that the police power was not only for the suppression of nuisances but that "It extends to and includes the regulation of the conduct of all business and the use of property to the end that public health or morals may not be impaired or endangered." The opinion contained other extremely valuable principles. So far as known, no appeal has been taken from these decisions to the federal courts.

Michigan. The Common Council of Grand Rapids on October 17, 1910, passed an ordinance establishing residence districts and subsequently such ordinance was amended by creating additional residence districts.

The validity of this ordinance was attacked in the case of *Cusick vs. Davidson* and in an opinion handed down by the Superior Court of Grand Rapids it was held that this ordinance was unconstitutional and void, among other reasons, on the ground that "such ordinance constitutes a taking away of the property of relator without due process of law, in violation of the provisions of the Fourteenth Amendment of the Constitution of the United States."

In this opinion the court did not give its reasons for reaching this conclusion. The case was not appealed.

Maryland. The city of Baltimore in its building code (section 47, subdivisions 12 and 13) limits the location of certain buildings which are enumerated in the code. No permit for the erection of any such building may be given by the inspector of buildings except with the approval of the mayor, and in granting his approval the mayor incorporates in it such requirements regarding the location of the building as may in his judgment be necessary to safeguard the interests of the public. Provision is made for publication, calling the attention of the adjoining property owners to the proposed building and giving them an opportunity to protest. In granting or withholding their approval of a permit the building inspector and the mayor are governed by three considerations: (1) the fire hazard of the proposed building; (2) its effect on surrounding land values; and (3) its effect on the general welfare of the residents in the immediate vicinity.

The city of Baltimore also passed an ordinance in 1911 known as the Segregation Ordinance, providing in effect that no colored people after a certain date shall be allowed to live in certain districts and similarly that no white people shall be allowed to live in certain other districts. The constitutionality of this districting ordinance was tested in the case of *The State of Maryland vs. Gurry* and the Court of Appeals of Maryland handed down a decision (Decision 90, April, 1913) in which the basic principle of the ordinance was sustained, though it was held to be defective in form in certain respects which the court suggested be remedied by amendment.

Wisconsin. The legislature of Wisconsin in 1913 (chapter 743) passed an act authorizing cities of 25,000 or more to set aside exclusive residential districts. The act therefore affects the cities of Milwaukee, Green Bay, La Crosse, Madison, Oshkosh, Racine, Sheboygan and Superior. The act gives these cities the power to restrain the encroachment of business houses upon purely residential districts by making their admission to such district subject to the consent of a majority of the land owners and residents in the district. The Common Council of each city is given

absolute power to prohibit industries in a residential district irrespective of the desires of the property owners. A residential district may be as small as one city block. The establishment of residential districts may be upon the initiative of the Council or upon the petition of 10 or more residents in the district or block affected.

Under the terms of this act the city of Milwaukee is at present laying out a number of residential districts. Neither the act nor the ordinance has as yet been tested.

Minnesota. The legislature of Minnesota in 1913 passed an act (Statutes 1913, Chapter 420) empowering cities with a population in excess of 50,000 (Minneapolis, St. Paul, and Duluth) to establish exclusive residential and industrial districts. Acting under authority of this act the City Council of Minneapolis on February 28, 1913, passed an ordinance establishing certain residential districts. This act has not as yet been tested.

Illinois. The state of Illinois at the session of 1913 passed an act (Bill 411) empowering cities to establish residence districts and exclude therefrom certain other classes of buildings. This act was vetoed by the governor under date of June 28, 1913, upon an opinion from the attorney-general that such an act would be unconstitutional. The chief ground of his opinion was that the act did not contain provisions by which the property owners whose interests were affected could have something to say about the establishment of the residential district in question. This defect is not found in the provision of the Model Housing Law.

Canada. Under the Consolidated Municipal Act of 1913 as amended by the Act passed in the second year of the reign of His Majesty King George V (Chapter 40, Section 10), cities having a population of not less than 100,000 inhabitants are authorized by a vote of two-thirds of the whole Council to pass and enforce by-laws to prohibit, regulate, and control the location, on certain streets to be named in the by-laws, of apartment or tenement houses, and of garages to be used for hire or gain. Acting under authority of this act, the city of Toronto in 1913 passed a number of by-laws of this nature; namely, 6,517, June 16; 6,513, June 16; 6,569, July 2; 6,061, May

13. None of these acts or by-laws has as yet been tested.

Similar ordinances were adopted by the city of Calgary (by-law 1366, Building Ordinance) in 1912.

§ 10. TIME FOR COMPLIANCE. All improvements specifically required by this act upon dwellings erected prior to the date of its passage shall be made within ONE YEAR¹ from said date, or at such earlier² period as may be fixed by the health officer.

NOTE 1: It is but reasonable to allow a year's time to owners of the older houses to make those improvements in their buildings which are required as a matter of compulsion by the act (Article V), as some of these involve considerable expense.

Explana-
tion

NOTE 2: It should be noted that the health officials are given power, however, to deal with exceptional cases immediately and to require the improvements in such cases at an earlier time. Thus in the case of a leaky and defective privy vault which required immediate attention, it would be possible to demand the prompt removal of the vault and the substitution of modern sanitary conveniences, instead of patching up the vault and then a year later removing it.

§ 11. SCOPE OF ACT. All the provisions of this act shall apply to all classes of dwellings, except that in sections where specific reference is made to one or more specific classes of dwellings such provisions shall apply only to those specific classes to which such reference is made. All provisions which relate to dwellings shall apply to all classes of dwellings.

ARTICLE 11

DWELLINGS HEREAFTER ERECTED²

In this article will be found the provisions which must be observed when a person proposes to build a new dwelling or to convert or alter to such purposes a building which is not a dwelling.¹

NOTE 1: The descriptive note which follows the caption of each Article is explanatory, and has little legal significance. It is, however, very useful to the layman who has to use the law and if it has to be omitted in the statute because of local legislative rules it should be included in the edition of the law subsequently printed by the city authorities for the use of the public. Explan-
ation

NOTE 2: While each Article accurately states the extent of its application, namely, whether it applies solely to New Dwellings, to the Alteration of Dwellings to Maintenance, or to the Improvement of Existing Dwellings, it is not safe to rely on these captions, owing to changes that may take place in the structure of the act through subsequent amendments. The only safe course is to have each section stand on its own bottom. Therefore, in every section which relates to new dwellings, the phrase "dwelling hereafter erected" is always repeated in each case; similar procedure is followed in the other Articles of the act.

NOTE 3: Following the custom in many states, gaps are purposely left in the numbering of the sections so as to provide for new sections which later it may be found necessary to enact, thus preserving the continuity of the numbering. Under this system Article I ends with section 11, and Article II begins with section 20. Title 2 of Article II ends with section 47, and Title 3 begins with section 50; Article II ends with section 62, and Article III begins with section 70, and so on.

TITLE 1

LIGHT AND VENTILATION

§ 20. PERCENTAGE OF LOT OCCUPIED.^{1, 2, 3} No dwelling hereafter erected shall occupy, either alone or with other buildings, a greater percentage of the area of the lot than as follows:

(a) In the case of corner⁴ lots with streets on three sides, not more than NINETY⁸ per centum;

(b) In the case of other corner lots, not more than EIGHTY-FIVE⁸ per centum;

(c) In the case of interior lots which do not exceed sixty feet in depth, not more than SEVENTY⁸ per centum;

(d) In the case of interior lots which exceed sixty feet in depth and do not exceed one hundred and five feet in depth, not more than SIXTY-FIVE⁸ per centum;

(e) In the case of interior lots which exceed one hundred and five feet in depth⁸ and do not exceed one hundred and fifty-five feet in depth, not more than FIFTY-FIVE⁸ per centum;

(f) In the case of interior lots which exceed one hundred and fifty-five feet in depth and do not exceed two hundred and five feet in depth, not more than FIFTY⁸ per centum;

(g) In the case of interior lots which exceed two hundred and five feet in depth, not more than FORTY⁸ per centum.

The measurements shall be taken at the ground level.⁷ No measurements of lot area shall include any portion of any street or alley.⁵ Any portion of a corner lot distant more than SEVENTY feet from the corner line shall be treated as an interior lot.⁶

NOTE 1: Although the public has become accustomed to thinking in terms of percentage of lot oc- Explan-
ation

cupied, the limitation of lot area is of little practical value as a means of insuring adequate light and ventilation to all parts of a building. Many tenement houses have been erected in the past which have occupied but 50 per cent of the lot, but half the rooms in them have been totally dark and without ventilation, being either windowless rooms or opening on so small an air shaft as to secure neither light nor air. On the other hand, tenements covering 70 per cent of the lot have been erected and have had all their rooms well lighted and ventilated. The only way to secure adequate light and ventilation is to require every room, hall, bathroom, water closet or other important part of the building to have windows of a certain size opening directly on an open space of sufficient size; either the street, the yard or a court. When this has been *properly* done, everything has been done that is necessary to insure adequate light and ventilation. No limitation on the amount of lot that may be occupied will do more.

NOTE 2: How little bearing the limitation of percentage of lot occupied has on the question of adequate light and ventilation is at once seen when one reflects that the percentage requirements in all such laws stay fixed at a definite amount and do not increase with the increased height of the building; thus, the percentage of lot that may be lawfully occupied in the case of a ten-story building is the same as laid down for a two-story building!

NOTE 3: Why then have any limitation on the amount of lot that may legally be occupied? it may be asked. There is one strong reason remaining for the retention of it. It is an effective means of preventing congestion or land overcrowding. In the case of deep lots it is the only thing which prevents the building of houses way back on the lot. The deeper the building the more rooms there will be in it, and in the case of multiple dwellings the more people there will be living on that amount of land. The way to prevent too many people living on a given amount of land, therefore, is to make difficult the building of deep houses and tall buildings. These are the two factors.

NOTE 4: The plan followed here is to retain the percentage limitation solely for its value in prevent-

ing land overcrowding. This section therefore distinguishes in the first place between corner lots and interior lots, where the conditions are of course radically different, corner lots having light and air from the street on several sides of the lot. It then differentiates between the two kinds of corner lots, those with streets on two sides, and those with streets on three sides, imposing less restriction in the latter case than in the former. In the case of interior lots, the short lot is given more liberal treatment than the deep lot, and where lots exceed respectively 100 feet, 150 feet, and 200 feet in depth (105 feet is made the standard to be on the safe side and not cause hardship where lots are a few inches over 100 feet) to impose stricter conditions and prevent building to the extreme rear part of the lot.

NOTE 5: Streets and alleys are not part of the lot and should not be included in figuring percentage that may be occupied.

NOTE 6: Where does a corner lot end and an interior lot begin? is a question that has sometimes given trouble. This is of importance only in connection with this section and with section 22, relative to yards. As corner lots have greater privileges in these two respects than interior lots, unless some limit on their extent is imposed they might stretch almost indefinitely from one street to the next street, a distance sometimes of 400 feet, in order to secure the benefits to be obtained. The effect of this would be to defeat the purposes of the stricter requirements as to interior lots. To prevent this the arbitrary standard of 70 feet from the corner is imposed; beyond this point the rest of the lot is to be treated as an interior lot, both as to depth of yard and percentage that may be occupied. This is more liberal treatment than is usually accorded, as many cities require this at 25 feet from the corner, but it is wise liberality. The following diagram (Figure 13) illustrates the point involved.

The sketch shows a block front from street to street with a corner lot, 100 feet front and 100 feet deep. At the point A, 70 feet from the corner, the remainder of the lot becomes an interior lot. From that point on the yard has to be 25 feet deep instead of but 15 feet, and but 65 per cent of the lot can be occupied in that

portion (the shaded portion) instead of 85 per cent. The importance of this requirement is at once seen.

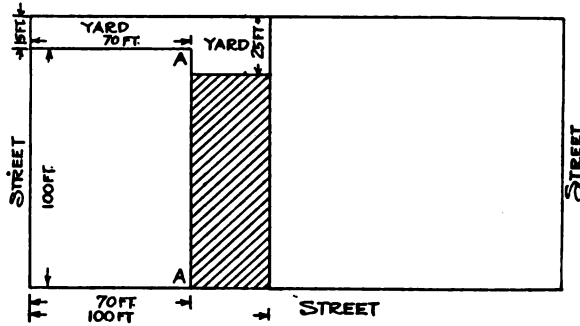


FIGURE 13

NOTE 7: The desirable condition is to have all open spaces—yards and courts—remain unbuilt upon all the way down to the ground. It is therefore provided that the measurements shall be taken at the ground level. But it is not always practicable to carry this point. In the case of hotels and apartment houses, especially the former, it is usually desired to utilize more space on the ground floor, and sometimes on the two or three lower floors, for public rooms—dining rooms, lobbies, lounging rooms, writing rooms, reception rooms, ball rooms, assembly rooms, etc. In such cases it is necessary to permit courts and yards and other open spaces to start at the top of the entrance story and sometimes two or three stories up. Little harm is done by this provided all living rooms open on the proper open spaces, especially as the public rooms above mentioned will invariably in such buildings be ventilated by some system of forced ventilation and be lighted by electric light.

In a similar way in business districts it will be desired to have shops or stores on the ground floor of many flats and tenement houses. In such cases it is necessary to cover over much more of the land on the ground floor, and in order to get a store of sufficient depth, the court, or part of it, will have to be occupied on the entrance story. Especially on corner lots where every foot of street frontage has a high value will the privilege of covering over the yard at the first

story be desired. To meet these viewpoints, the following concessions can be made. Change the sentence "The measurements shall be taken at the ground level" to read as follows:

CONCESSION 1: "The measurements shall be taken at the ground level, except that in the case of hotels the measurements may be taken at the floor level of the lowest bedroom story; and in the case of other multiple-dwellings where there are stores or shops on the entrance story, the measurements may be taken at the top of such entrance story." **Concession**

NOTE 8: This whole section, in view of the considerations expressed in notes 1, 2 and 3 is an excellent one to make concessions on, especially as the interests affected will think in terms of percentage of lot occupied and will rate the law as drastic or not drastic largely on this section. If concessions need to be made, the following may be made with safety. Make the following changes in the featured standards of this section: **Explanation**

CONCESSION 2: (a) Change NINETY to 95
 (b) Change EIGHTY-FIVE to 90
 (c) Change SEVENTY to 75
 (d) Change SIXTY-FIVE to 70
 (e) Change FIFTY-FIVE to 60
 (f) Change FIFTY to 55
 (g) Change FORTY to 45 **Concession**

§ 21. HEIGHT.¹ No dwelling hereafter erected shall exceed in height the width of the widest street upon which it abuts nor in any case shall it exceed ONE HUNDRED feet² in height. Such width of street shall be measured from building line to opposite building line.³

NOTE 1: There is no city excepting New York in which this limit of height will prove a hardship so far as dwellings are concerned, with the exception possibly of hotels. This is the best way to limit the height of buildings. We are on safe ground here and such regulation will unquestionably be sustained by **Explanation**

the courts, whereas a flat limit of so many feet might not be sustained. Limiting the height of buildings to the size of the open space on which they abut, in accordance with a scientific principle, is unquestionably a reasonable exercise of the police power. It can be demonstrated by inspection of existing buildings of any city that this represents the minimum standard which will insure sufficient light and ventilation to the building itself and to neighboring buildings.

NOTE 2: The flat limitation of 100 feet, irrespective of the width of the street, is important, so as to safeguard conditions in cases where there are very broad streets, avenues, or boulevards from 150 to 200 feet wide. It is neither necessary nor desirable to permit dwellings to be built as high as this in any city. The standard of 100 feet which is fixed, is fixed to suit conditions where land values are at their highest. A more stringent requirement making the minimum height 75 feet would be nearer the ideal.

NOTE 3: It is necessary to specify that the width of the street shall be measured from building line to building line. In cities where there is no "official" building line, the first thing to do is to get a building line established.

NOTE 4: It is a nice question whether in the case of the high class modern hotel provided with the comforts and luxuries which people nowadays demand, high buildings are not inherently a necessity. Such buildings cannot pay unless a sufficient number of guests are accommodated. To accommodate these the building must go up into the air; otherwise it would have to extend over so much ground as to be prohibitive in some cities because of the cost of the land, and in all cases it would make too great a distance for guests to travel horizontally inside the building in order to get to the dining rooms and other public rooms. If it is desired to permit hotels to be built higher than other dwellings add at the end of the section the following:

Concession

CONCESSION 1: "The provisions of this section shall not apply to hotels."

Explanation

NOTE 5: In some cities the practice prevails of voluntarily setting back the house a considerable dis-

tance from the building line in order to secure a large front yard with lawn and driveway. Some architects believe that allowance should be made for such setbacks and that these should be added to the width of the street in calculating the limit of height. This is not, however, desirable nor is it necessary. There are practically no cities in the United States, outside of some of the large eastern cities like New York and Boston, where the restriction as to limit of height proportionate to the width of the street as embodied in this section will present any difficulties.

§ 22. YARDS. Immediately behind every dwelling hereafter erected there shall be a rear yard ^{1,2} extending across the entire width of the lot.³ Such yard shall be at every point open and unobstructed from the ground ^{13,14,15} to the sky.⁴ Every part of such yard shall be directly accessible from every other part thereof.⁵ The depth of said yard shall be measured at right angles from the rear lot line to the extreme rear part of the house. Such depth shall increase proportionately with an increased height of the dwelling and shall be proportionate to the depth of the lot as follows:⁶

(a) In the case of corner lots no rear yard shall be less than FIFTEEN per centum of the depth of the lot.

(b) In the case of corner lots with streets on three sides the rear yard need not extend across the full width of the lot, but only to its median line.⁸

(c) In the case of interior lots no rear yard shall be less than TWENTY-FIVE per centum of the depth of the lot.

If the dwelling exceeds three stories in height, the depths⁷ above prescribed shall in each case be increased FIVE per centum for each story above three stories.¹⁰ If the dwelling is less than three stories in height, the depths above prescribed may be decreased FIVE per centum for each story below three stories. Irrespective of the above provisions, no rear yard under any circumstances shall ever be less than FIFTEEN feet in depth.⁹ A front yard may be any depth.¹¹ Any portion of a corner lot distant

more than SEVENTY feet from the corner line shall be treated as an interior lot.¹²

Explanation

NOTE 1: No subject in the entire law is of more importance than provision for a proper open space at the rear of the dwelling. This assumes especial importance in view of what has been said as to the lack of value of regulating open spaces through limiting the percentage of lot occupied, discussed under section 20. To be logical we should require as large an open space in the rear of the dwelling as there is in front; in other words, if it is necessary to make the

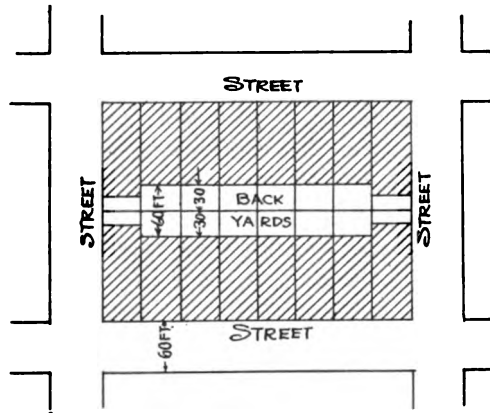


FIGURE 14

street 60 feet wide where the buildings on each side of it are to be not over three stories in height, it is obvious that it is necessary to leave a similar space between dwellings at the rear; that is, that there should be 60 feet from the rear of one building to the rear of another building on the next parallel street. In fact a space of greater depth should really be required at the rear because one cannot always be sure of this space being a continuous open space, thus insuring proper circulation of air and proper lighting of the rear portions of the individual building. This is always insured at the front as the streets are continuous air-ways extending often for many miles. The minimum requirements established in this section are based upon the assumption that there will be in most

cases a neighborhood development, and that if one man leaves a rear yard of 30 feet behind his dwelling, in all probability his neighbor owning the lot abutting at the rear will leave a similar open space of 30 feet, making 60 feet between buildings.

NOTE 2: The question at once arises whether these requirements are equally appropriate in cities where a system of alleys prevails. A plea will be made in most cases to permit the alley to be included as part of this minimum open space and to allow the depth of the rear yard to be measured from the rear wall of the building to the middle line of the alley. This is plausible but should not be agreed to. The largest open space possible that can be left at the rear is desirable and the standards established in this section are the minimum. It would be desirable to have even deeper yards if it were always commercially practicable. In this connection it should be noted that with land values as they are at present in residence districts there are few cities in which it is commercially necessary in order to get a fair return on the investment, to make the rear yards less than the minimum depths herein established. This does not mean that interested parties will not wish to make the depths less. They will. But they should not be permitted to, and investigation will develop in practically every case that the minimum depths established in this section are less than the depths that have actually been voluntarily left by the majority of owners in recent building operations in each city.

NOTE 3: The requirement that the rear yard shall extend across the entire width of the lot is of importance. Without such a requirement attempts would be made to leave inadequate yards, as illustrated in Figures 1 to 4.*

NOTE 4: It is of great importance to require that the yard shall be unobstructed from the ground to the sky. Otherwise it would be possible to have fire-escape balconies and outside porches encroaching considerably on the open space which is so necessary to furnish light and air to the rear parts of the building. It is obvious that it is of little use to require a 15-foot yard for the purpose of light and ventilation and then allow it to be completely occupied by an outside porch

* See pp. 36, 37 and 38.

or balcony, as is frequently the case in many cities. This provision is also to be read in connection with sub-division 16 of section 2.

NOTE 5: The requirement that every part of the yard shall be directly accessible from every other part is made necessary where the rear lot line is of an irregular shape and where the lot has more than one depth, as sometimes happens, as shown in Figure 2.*

NOTE 6: A distinct departure from the provisions found in similar statutes is made in this law in the method of regulating the depth of yards. Here an attempt is made to make the depth of the yard proportionate to the depth of the lot. This plan has been adopted because it has been feared that the methods heretofore employed of fixing arbitrarily a certain minimum depth in feet might not be sustained if tested as to constitutionality, because it would not be possible to show that this method of regulation was based upon a scientific principle. If all lots were the same depth this question would not be so complicated, but where lots vary from 60 feet in depth to 250 feet in depth, and even more, the subject is seen to be somewhat complex. Assuming that a 30-foot yard is the minimum sized yard that should be left for a three-story dwelling in most cities, it would be perfectly easy to require this in the case of lots 100 feet or more in depth, but there are many lots known as "tail-enders," having been cut off where the lots from another street have been subdivided in a certain way, which often do not exceed 60 feet in depth and sometimes do not exceed even 40 feet in depth. To require a 30-foot rear yard on a lot 40 feet in depth would, of course, be absurd and would have the effect of making impossible the development of such property. In addition it is very desirable to have some automatic method of regulating the evils of the deep lot and thus prevent the building far back on the lot of long, deep buildings which are responsible in large degree for lot overcrowding and congestion of population. (See discussion under section 20.)

As the best means, therefore, of meeting all these conditions, the plan set forth in this section has been evolved. This gives an automatic control of depth of

* See p. 37.

building and depth of yard both on shallow lots and on lots of excessive depth. It does not make prohibitive the development of a short lot nor, on the other hand, does it give a short lot an undue or unfair advantage. It places all lots on the same basis in that the depth of the yard is proportionate to the depth of the lot.

NOTE 7: Lots are often of varying depths. One side of the lot may be 25 feet deeper than the other side. In such cases the mean depth is to be taken. (See section 2, sub-division 10.)

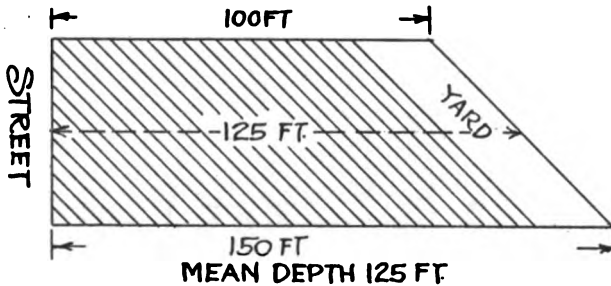


FIGURE 15

NOTE 8: Where a dwelling is erected on a corner lot bounded by streets on three sides it would cause undue sacrifice of especially valuable property, namely, that with a street frontage, to require in such cases the rear yard to extend across the entire width of the lot. All proper purposes will be satisfied if under such circumstances the yard extends to the median line. It will thus afford an ample intake of air to insure circulation of air throughout the rest of the block. The diagram on page 82 illustrates this point. ADCA is a corner lot bounded by three streets. The rear yard instead of extending all the way across the lot from A to A is allowed to stop at B, the point of intersection with the median line of the lot. It thus furnishes a means of renewing the air in the back yards of the lots R, S, T, U, etc., and the owner does not have to sacrifice valuable street frontage along the side AC.

NOTE 9: It will be noted that the standard laid down for corner lots is different from that laid down

for interior lots. This is but right. A dwelling on a corner lot has streets on at least two sides and sometimes on three sides and has therefore much greater opportunities for light and air, especially for continuous air currents. In addition, street frontage is very valuable and the owner should not be required to sacrifice more of this than is absolutely necessary to insure the proper lighting and ventilation of his building. While it is provided that the depth of yard of a corner lot shall not be less than 15 per cent of the depth of the lot, this requirement is subject to the further requirement found later in the section,

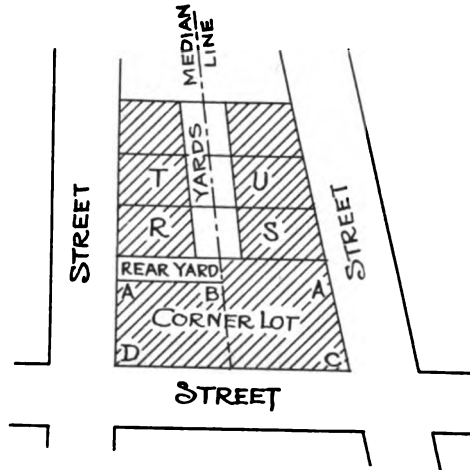


FIGURE 16

that no yard under any circumstances shall be less than 15 feet in depth. Thus in the case of a corner lot 60 feet in depth, it would not be possible to have the yard but 9 feet deep, which would be 15 per cent of such a lot, but the yard in such case would have to be 15 feet in depth. Fifteen feet is the irreducible minimum; a yard less than this cannot furnish adequate light and ventilation.

Similarly with an interior lot. Assuming that there might be a lot but 40 feet in depth, while it is true that sub-division (c) provides that a yard shall not be less than 25 per centum of the depth of the lot,

the yard cannot in such case be as small as 10 feet in depth. It can never be less than 15 feet in depth—the irreducible minimum.

NOTE 10: Of course the size of the yard, as in the case of other open spaces, should increase with an increased height of the dwelling, and this is provided for here. The standards herein established are for the usual type of building; namely, a dwelling three stories high. Where a dwelling exceeds this height it is provided that the yard shall increase 5 per centum in depth for each story, and where a dwelling is less than three stories in height a similar decrease of 5 per centum is permitted, but never so as to furnish a yard less than the irreducible minimum of 15 feet. Under this plan the following results will be obtained for buildings of varying heights, assuming for purposes of illustration a lot depth of 100 feet:

YARD DEPTHS (LOT 100 FEET DEEP)

<i>Height</i>	<i>Corner lots</i>	<i>Interior lots</i>
1-story.....	15 feet	15 feet
2-story.....	15 feet	20 feet
3-story.....	15 feet	25 feet
4-story.....	20 feet	30 feet
• 5-story.....	25 feet	35 feet
6-story.....	30 feet	40 feet

and so on.

It will be seen that this automatically checks the erection of high buildings by imposing a requirement for a very much larger yard as the building increases in height. This is deliberate. A high building in the case of dwellings is unnecessary (except in the case of hotels already referred to) in practically all of our American cities excepting New York. This is the best way to prevent their erection. If it is desired to encourage the erection of high buildings it can easily be done by making the standard of increase considerably less than 5 per centum per story.

NOTE 11: The phrase "a front yard may be any depth" may seem unnecessary. It is, however, necessary. (See note 3 in the discussion of section 2, subdivision 7.)

NOTE 12: The question may be asked, Where does a corner lot end and an interior lot begin? In view of the greater liberality of the law toward corner lots,

permitting smaller yards and a larger percentage of the lot to be occupied, there is a direct incentive for the builder to evade the law's requirements and build over a very large frontage, and call it all a "corner" lot; later subdividing his building and selling off portions of it; that is, erecting several buildings in the guise of one, having all the buildings classed as one corner building instead of as one corner building and several interior buildings.

The line must be drawn somewhere. It has been set at 70 feet with a desire to be liberal to investors and builders and to be sure that a building 50 feet or more in width will be treated legitimately as a corner building. In most cities the line is drawn at 25 feet, but this is unnecessarily strict. Figure 13 (p. 74) illustrates how it is necessary to break back the yard at a point 70 feet from the corner in the case of a building being erected with 100 feet frontage.

NOTE 13: In certain cases some objection will be made to the requirement that the yard shall extend from the ground to the sky. Permission will be desired to cover over either a portion of the yard or all of it on the ground floor. This will be especially sought after in the case of corner lots because of the value of street frontage, especially in districts where it is advantageous to use the ground floor for stores or shops. Similarly it will be desired to build over a portion of the yard on interior lots where it is wished to get a very deep store. A third case is the case of hotels, where the owners will want to build over the yard not only on the ground floor but also possibly to the height of two or three stories so as to secure the space necessary for public rooms such as dining rooms, ball rooms, music rooms, and for similar purposes. All of these points of view will have to be considered.

The considerations involved are quite different in the three different classes of cases. Taking up the first, namely, covering over the yard on the ground floor in the case of corner lots: It is very desirable to have the yard extend to the ground where it is practicable, but where this is a matter that is much desired by the interests affected it is a point where a concession can wisely be made because of the reasonableness of the claim. There is no question as to the

desirability of having the yard extend all the way down to the ground. That should be the practice in every case. On the other hand, there is from the point of view of the owner a hardship in not being allowed to utilize his property so as to get the full value out of the most valuable part of it; namely, the street frontage. If it is decided to recognize this situation and to make this concession the following modification could be adopted. After the words "from the ground to the sky," strike out the period, insert a comma, and add the following:

CONCESSION 1: "except that in the case of corner lots the rear yard may start at the top of the entrance story." **Concession**

NOTE 14: The second class of cases where it is desired to cover over the yard on the ground floor on an interior lot, in order to secure a very deep store, is not at all in the same category. Such a concession should not be granted. It should be remembered that these provisions occur only in connection with dwellings, not with commercial buildings where the conditions of course are very different, and the only occasion where this becomes a practical question is where it is desired to have a store on the ground floor of an apartment house, or two-family house, or other kind of dwelling. So long as it is permitted to cover over the courts on the ground floor or part of them, it will be possible to get a store of sufficient depth without encroaching upon the yard space. **Explanation**

NOTE 15: The third class of cases, namely, that of hotels, presents the most important considerations of all. It has been pointed out in the earlier discussion of this section that it is necessary to build modern hotels to a considerable height and it will be seen from the table of Yard Depths under note 10 that because of the requirement that the yard shall increase 5 per centum for each additional story above three stories, that where it is desired to erect a ten-story hotel a yard of 60 feet, in the case of an interior lot, would be required, and in the case of a corner lot a yard of 50 feet. This would be prohibitive in most cities. No modern hotel should be erected on an interior lot. Practically all such buildings are erected on corner lots, with streets on three sides. So that the only thing to be considered is the relation of the

provisions with reference to corner lots of this kind in its bearing upon hotels. For the reasons above advanced, the following concession may be wisely made. In sub-division (b) of this same section after the words "to its median line" strike out the period, insert a semi-colon and add the following:

Concession

CONCESSION 2: "in the case of hotels located on such lots no rear yard need be provided."

§ 23. SIDE YARDS.¹ No side yard is required for dwellings hereafter erected, but they may be built up to the lot line. If, however, any side yard is left it shall be at every point open and unobstructed from the ground to the sky and its width shall be proportionate to the height of the dwelling and no side yard shall be less in width in any part² than as follows:

The minimum width of a side yard, measured to the side lot line, for a one-story dwelling shall be FOUR feet;³ for a two-story dwelling, FIVE feet; for a three-story dwelling, SIX feet; for a four-story dwelling, SEVEN feet; for a five-story dwelling, NINE feet; and shall increase TWO feet for each additional story above five stories.

Explanation

NOTE 1: No section in the entire act will arouse so much opposition as the attempt to regulate the space between adjacent buildings and to require the leaving open of a sufficient space to give adequate light and ventilation. The ideal condition would be to require every dwelling hereafter erected to have plenty of open space on all sides of it. This is of course not practicable in large cities or in the well built-up portions of small ones, desirable though it may be. In such places it is often necessary to build houses in contiguous rows, "terraces" as they are called in certain sections of the country. In the case of apartment houses, flats and tenement houses, and many other classes of dwellings this is the only type of construction that is likely to be considered. In the case of most private dwellings, however, except in the largest cities, and even in the case of two-family houses, it will still be found possible to leave an open space between the buildings. It has not been sought, there-

fore, in this act to impose a mandatory requirement against the erection of houses in contiguous rows. Such a requirement would probably be unconstitutional. It is, however, of great importance to make sure that adequate space is left between buildings where dwellings are not built solidly in rows. The prevailing practice in most of our cities is to leave a totally inadequate space; sometimes only a foot between buildings, often as little as 3 feet and only in rare cases is anything like an adequate space provided. The purpose of leaving an open space at the side of a building is to furnish sufficient light and air to the windows of the rooms in the interior part of the building which do not open on the street or front or rear yard. It is far better that no space should be left than to have a space left which will furnish neither light nor ventilation but instead simply becomes a damp, dark pocket and gathering place for rubbish and waste material. Experience shows conclusively that no less than 15 feet should be left between dwellings. This will give a side yard of a minimum depth of $7\frac{1}{2}$ feet on each side of each dwelling. With the width of lot that has been employed in the past in most of our cities, objection will at once be made to this requirement as "idealistic" and impracticable. It will be claimed that this requires the giving up of 15 feet of the width of the lot for side yards and that on a 25-foot lot this would leave but 10 feet for the dwelling, and that this is absurd,—which of course it is. Even on a 40-foot lot this provision will only allow a dwelling 25 feet wide, if the house is placed in the middle of the lot, and this is not large enough for the class of dwelling which it is desired to erect in most of our cities. The standards adopted in this section, therefore, represent as near an approximation to the ideal as it seems wise to go and should be treated as the irreducible minimum. This will give in the case of a three-story dwelling a 6-foot side yard. If a similar yard were left on the adjacent property it would mean 12 feet between buildings which, while not entirely adequate, would give very satisfactory conditions.

The best way to meet the opposition which will undoubtedly arise to this important provision is to take photographs showing the narrow spaces that

exist in the city affected and show the darkness and dampness (through reports of sanitary inspectors), and in the case of the dwellings of the poor, the accumulations of waste material that have gathered in these spaces. Before we can achieve satisfactory conditions in most of our cities it will undoubtedly be necessary to bring about a change in the methods of dividing property and secure the adoption of a wider lot unit. Forty feet should be the minimum width of lot for the ordinary type of dwelling; 50 feet is far better.

NOTE 2: A study of the standards established for side yards as compared with the standards for widths of courts laid down in section 24 shows a material variation though the principle is the same. In each case a minimum dimension is established and the size of the open space is made proportionate to the height of the dwelling. A side yard is very different from a court. A court may be enclosed on all four sides and there is comparatively little opportunity for the circulation of air, as all the light and air must come down over the roof. Even in the case of the outer court which is open at one end and where the opportunity for the intake of air is better, still the possibilities of its circulation are somewhat limited. The side yard has a continuous open way extending from the street to the rear yard, thus insuring a circulation of air at all times, provided the open space is large enough. Similarly, if the space is wide enough, light has much greater opportunities of reaching the rooms opening upon this open space than in the case of a court where it can reach the rooms only as it comes down over the top of the court wall. For these reasons, the standards for side yards are logically set lower than the standards for courts.

NOTE 3: Strong arguments will be presented to permit encroachments upon the side yard space by means of porches and bay windows. This should not be permitted. The minimum widths set down in this section are the minimum and should not be encroached upon. Bay windows are not at all necessary in the side yard, as the principal rooms of the house do not usually open upon that kind of open space but upon the street, or front yard, or rear yard where it is easily feasible to have bay windows. With regard to porches in side yards, the situation is somewhat

different. While it is true that ample porch facilities for any dwelling can be obtained at both front and rear, it will be found in a number of cities, especially in the case of two-family houses, that it is desired to have the entrance for one of the families by means of a porch or piazza at one side of the building. This must necessarily extend into the side yard. Having the porch in this location is of course not a necessity as the building can be so planned as to permit entry to both apartments from the front, but this may involve a change in the habits of the people and it may not be worth while to attempt to overcome the opposition that will be aroused by such a change. If, therefore, it is desired to meet this point of view the following concession is suggested (see also section 2, subdivision 16). After the words "to the sky" strike out "and its width" and insert a period and the following:

CONCESSION 1: "In a private-dwelling or a two-family-dwelling hereafter erected one unenclosed outside porch may be located in the side yard, provided such porch does not extend into the side yard a greater distance than SIX feet from the side wall of the building nor exceed TWELVE feet in its other horizontal dimension. The width of the side yard in dwellings hereafter erected"

Concession

§ 24. COURTS.¹ The sizes of all² courts in dwellings hereafter erected shall be proportionate to the height of the dwelling.³ No court shall be less in any part⁴ ⁵ than the minimum sizes prescribed in this section. The minimum width of a court for a one-story dwelling shall be SIX feet, for a two-story dwelling SEVEN feet, for a three-story dwelling EIGHT feet, for a four-story dwelling NINE feet, for a five-story dwelling ELEVEN feet,⁵ and shall increase TWO feet for each additional story above five stories. The length of an inner court shall never be less than twice the minimum width prescribed by this section.⁶ The length of a court, except in the case of a side yard, shall never be greater than FOUR times its width.⁷ The width of all courts adjoining the lot line shall be measured to the lot line and not to an opposite building.⁸

Explanation

NOTE 1: The comments in connection with the definitions (section 2, sub-division 7) have a special bearing on this section, and should be read in connection therewith.

NOTE 2: While there is a material difference between outer and inner courts and logically they should be treated in the law on a different basis, the outer court being permitted to be of a less size than the inner court because of the better opportunities for securing light and ventilation, yet in this law all courts have been treated alike. This has been done deliberately with a full realization that it is not "logical." It has been done in order to keep the law as simple as possible. It is especially desirable to keep it simple in this section, as it is very easy to have extremely complicated provisions with reference to open spaces, especially courts, unless one is on one's guard. The difference between this law and the New York City law in this respect is marked. Here it has been possible to embody all the provisions with reference to sizes of courts in 153 words. In the New York law it takes 2,030 words to treat the same topic, the provisions comprising some six closely printed pages of small type. The result is a complicated provision which the ordinary layman has difficulty in understanding.

NOTE 3: The plan adopted for regulating the size of courts is similar to the plan already discussed in connection with section 23. A minimum width of court is established below which adequate light and ventilation cannot be obtained. Then this dimension is required to be increased proportionately with each additional story of the building in height. The following table shows the sizes of courts that are required for buildings of different heights.

COURTS

<i>Height</i>	<i>Width of Court</i>
1-story	6 feet
2-story	7 feet
3-story	8 feet
4-story	9 feet
5-story	11 feet
6-story	13 feet
and so on.	

It should be noted that these sizes apply to all

kinds of courts; namely, outer and inner courts, courts on the lot line, and courts between wings of the building.

NOTE 4: The phrase "less in any part" is an important one. The irreducible minimum is the irreducible minimum. If a court 6 feet wide is the least sized court which will give adequate light and ventilation it is obviously unwise to permit any open space which is left for the purposes of light and ventilation to be of a less size. Architects, because of greater convenience in planning, will want to use all sorts of little recesses and extensions of a smaller size and different dimensions from those laid down in the law. This should not be permitted, as it will result in dark, damp, unventilated and unsanitary shafts such as have prevailed in many of our larger cities to the great detriment of the occupants of the house. The following diagram shows some of these types of extensions and offsets, which are illegal unless they are made of adequate width when they may then be permitted.

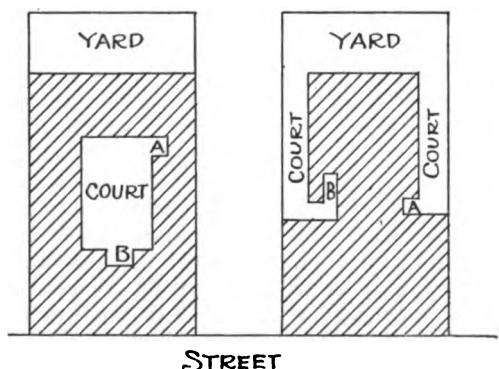


FIGURE 17

NOTE 5: It should be noted that the ratio of increase in the width of the court for each additional story in height of the building is an increase of 1 foot up to a dwelling four stories high. Beyond that point the ratio of increase is doubled and the width of the court must be in each case increased 2 feet in width instead of 1 foot. This is done deliberately as a

means of checking the erection of very high buildings. (In this connection see further discussion on this subject under Side Yards, section 23, note 2.)

NOTE 6: The requirement that "the length of an inner court shall never be less than twice the minimum width prescribed by this section" is frequently not understood without analysis, especially in view of the requirement which immediately follows it and which seems to be a contradiction of it. Both requirements are accurately expressed and mean what they say. The requirement above quoted is made necessary to insure an inner court of adequate size. Instead of attempting to fix arbitrarily the length of an inner court a scientific principle has been evolved by which the second horizontal dimension of an inner court shall always be equal to twice the minimum width prescribed in the law. Thus an inner court, which the law requires to be 8 feet wide, may not be less than 16 feet in length. The reason for this is that without this requirement neither sufficient light nor proper ventilation can be assured in this type of court where all the light and air that come in must come in over the top of the court. It should be noted that this provision does not require the length of the court to be twice the width, but merely twice the *minimum* prescribed by the law. They are very different things. To illustrate: In the case of a three-story dwelling the law requires a court to be 8 feet wide. It is conceivable that an owner might prefer to have his court 12 feet wide; in other words, build better than the law requires. It would be obviously unfair in such case to penalize him and require him to have his court 24 feet long (twice its width), whereas his neighbor might build an inner court 8 feet wide and 16 feet long and have it entirely legal.

NOTE 7: A similar misunderstanding exists with regard to the provision "The length of a court, except in the case of a side yard, shall never be greater than four times its width." This seems to be a direct contradiction of the previous provision and to a person not familiar with the conditions, unreasonable. Courts become objectionable when they are long and narrow. The sunlight which streams in at the end or over the roof will not under such circumstances reach all portions of the court. The further away a

room is from the outer end of a court the less desirable it becomes. It is for the purpose of preventing the use of narrow courts of undue length that this provision has been formulated. It furnishes an automatic means of regulating this evil.

NOTE 8: The requirement that the width of the court shall be measured to the lot line and not to an opposite building, while not legally necessary in view of the definition of a court as contained in sub-division 8 of section 2, is here stated in the way that it is stated in order to make this subject so plain that no one can either misunderstand it or present arguments to the enforcing officials to be permitted to light or ventilate any portion of their dwelling from the adjoining premises. This puts an end to the evils of "borrowed light." In this connection see the discussion under section 2, sub-division 7, note 1.

NOTE 9: Sometimes permission is desired to leave on the premises on which the dwelling is to be erected passageways of a smaller width than the minimum dimensions laid down in the law for yards or courts; claim being made that such spaces are additional to those required by law and that therefore it ought not to be necessary to make them so large, inasmuch as the rooms and other parts of the building all open directly upon courts of legal size and that if any windows open on these narrower spaces they will be supplementary to the windows required by law. This is plausible but it is dangerous to permit it. Such spaces create unsanitary conditions. They are bound to result in dampness and invariably become gathering places for waste material; if supplementary windows open upon them it is likely that ultimately when it is proposed to alter the dwelling additional rooms will be created which will get their sole light and ventilation from these spaces. The only safe course of procedure is to require all open spaces to be of an adequate size.

§ 25. COURTS OPEN AT TOP. No court of a dwelling hereafter erected shall be covered¹ by a roof or skylight. Every such court shall be at every point open from the ground² to the sky unobstructed.³

NOTE 1: It is obvious that a court which is relied

Explanation

upon to furnish ventilation will be worthless if covered over at the top with a skylight or glass awning, and yet this kind of court was in use considerably some years ago and is still used in some European cities. It is, however, antiquated and should not be permitted. A court should be open to the sky. Little enough air will be provided at the best. Nothing that obstructs it should be tolerated. The requirement that the court shall not be obstructed prohibits the placing of fire-escape or other balconies in courts, thus encroaching upon the minimum space permitted.

NOTE 2: In connection with the discussion of Yards (note 13, section 22), the desire of certain interests to build over portions of the yard and courts on the ground floor and the propriety of this under certain limitations have been fully discussed. If it is determined to be wise to permit this and to adopt concession 1 suggested in connection with section 22, then the following similar concession should be adopted for section 25. Strike out the period at the end of the section, insert a comma, and add the following:

Concession CONCESSION 1: "except that in the case of hotels, courts may start at the floor level of the lowest bed-room story; and in the case of other multiple-dwellings where there are stores or shops on the entrance story, courts may start at the top of such entrance story."

Explanation NOTE 3: It should be observed that this permits in the case of hotels the covering over of the courts on all the stories below the first bedroom story; that is, stories in which the public rooms of the hotel are located, but this permission does not in any way include the right to have rooms on such stories which do not have windows opening directly to the outer air; here the provisions of section 29 will govern.

Similarly in the case of apartment houses and other multiple dwellings where there are stores or shops on the entrance story, the courts may start at the top of such entrance story. It should be carefully noted that in both of these cases the entire court must go down to the bottom, wherever that bottom is located. It will not be possible, for instance, to stop a portion

of the court in the case of a hotel at the third story and then extend down the rest of the court to the first story, unless the court is at such point the minimum dimensions prescribed in section 24. In other words,

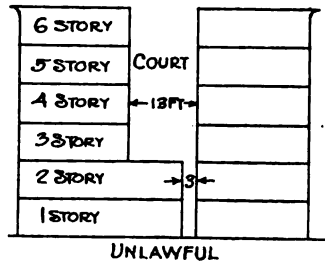


FIGURE 18

A COURT CARRIED DOWN UNLAWFULLY

there is no prohibition against stopping a portion of the court at the third story and extending the rest down for two more stories to the ground floor, provided the court for those two lower stories is the full size that is required as a minimum in section 24. To do this, however, would mean that the court above

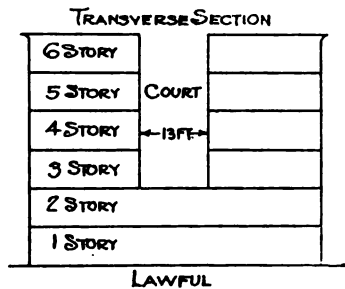


FIGURE 19

A LAWFUL COURT

the third story would have to be of a larger size than the minimum required by the law. Figures 18 and 19 illustrate this. Figure 18 shows what is not permitted with the court extended down less than the minimum size. Figure 19 shows what is permitted with the court extended down the legal size. Both diagrams are "sections through."

§ 26. AIR-INTAKES.¹ In all dwellings hereafter erected every inner court shall be provided with two² or more horizontal air-intakes at the bottom.³ One such intake shall always communicate directly with the street or front yard and one with the rear yard, and each shall consist of a passageway⁴ not less than three feet wide and seven feet high which shall be left open, or be provided with an open gate at each end.

Explanation

NOTE 1: The purpose of this requirement is to provide a means of renewing the air in inner courts. Air currents are generally horizontal; without these intakes or tunnels the air in an inner court is pretty sure to be stagnant most of the time except at the top story. With this provision, however, excellent ventilation is furnished; that is, as good ventilation as can be obtained through the use of courts. This system has been in vogue for some years in several cities and has given great satisfaction. A strong current of air is gen-

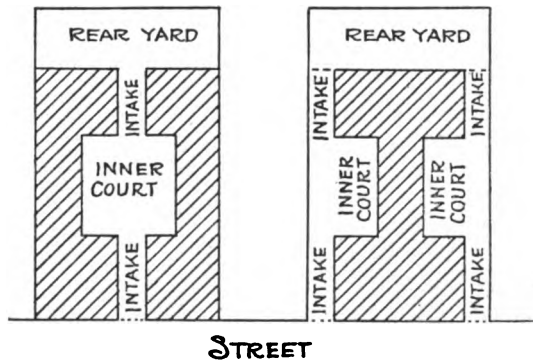


FIGURE 20
INTAKES

erally to be found circulating through the court. It is, of course, essential that the tunnel should always be kept open and that the occupants of the house should not be allowed to obstruct the free passage of air by using the tunnels as storage places or by closing them up at the ends with solid doors, both of which experiences have been had in cities where the intake is used. The tunnels are not expensive; generally one of the side

walls of the building acts as one of the walls of the tunnel, and all that it is necessary to build is the opposite wall, which can be a partition. It is better to build it substantially in order to minimize the fire danger. The tunnels are also an excellent means of exit from the yard to the street in case of fire and in the case of apartment houses afford a convenient delivery entrance for tradesmen. The above diagram illustrates the arrangement of the intake.

NOTE 2: In some cities there will be a good deal of opposition to this requirement with reference to the intake leading to the street, especially where it is desired to use the ground floor of the building for stores or shops. In such cases objection will be made to giving up the space necessary for the intake, on the ground that it will interfere with the proper size and shape of store desired. This is true. Objection will also be made to taking the intake through the cellar in such cases, because of the extra expense involved in carrying the court down to the cellar level and the necessity of providing an areaway and grating at the front of the building. These objections have a good deal of merit. If it is desired to meet them, the best way is to require but one intake. In such case the following concession is suggested. Substitute the following:

CONCESSION 1: "§ 26. AIR-INTAKES. In all dwellings hereafter erected every inner court shall be provided with one or more horizontal air-intakes at the bottom. One such intake shall always communicate directly with the rear yard and shall consist of a passageway not less than three feet wide and seven feet high which shall be left open, or be provided with an open gate at each end."

Concession

NOTE 3: It should be noted that the law is silent as to whether the intake or tunnel should be begun at the level of the entrance story or at the cellar or even at the second story. This is deliberate and great latitude in this regard is given to the owner. The requirements of the law are satisfied and the purposes of the section are secured if the tunnel is left at the bottom of the court, wherever that bottom may happen to be. If the court extends down to the ground,

as is contemplated by this law, then the tunnel would start either at the ground level or in the cellar.

NOTE 4: Permission may be asked to use a metal duct instead of the open passageway. This should not be granted as experience shows such ducts to be unsatisfactory. They do not allow sufficient movement of the air, as they often run with turns and angles in them. Cats crawl into them and commit nuisances, and they become generally objectionable. The tunnel is the only thing that is adequate.

§ 27. ANGLES IN COURTS. Nothing contained in the foregoing sections concerning courts shall be construed as preventing the cutting off of the corners¹ of said courts, provided that the running length of the wall across the angle of such corner does not exceed seven feet.²

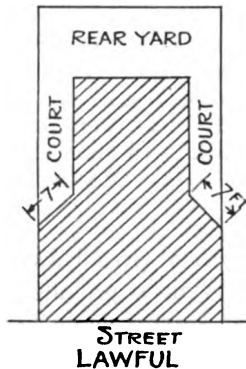


FIGURE 21

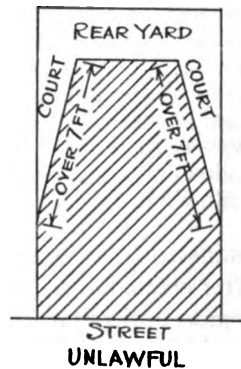


FIGURE 22

Explanation

NOTE 1: The purpose of this section is to permit the cutting off of the corner of a court so as to secure a window at an angle, thus obtaining better light, as illustrated in Figure 21.

NOTE 2: The limitation of 7 feet in length of the portion of the wall thus set at an angle is necessary as otherwise evasion of the requirement establishing the minimum width of the court will be possible; ingenious architects will be quick to seize this loophole and plan a court as shown in Figure 22, so as to make the wall running at an angle practically coincide with

the entire length of the court, thus materially reducing the width desired.

§ 28. BUILDINGS ON SAME LOT WITH A DWELLING.¹ If any building is hereafter placed on the same lot with a dwelling there shall always be maintained between the said buildings an open unoccupied space² extending upwards from the ground and extending across the entire width of the lot. Such space shall never be less than TWENTY feet in depth; where both buildings exceed one story in height such space shall be not less than THIRTY feet in depth; and if either building is four stories in height such open space shall be THIRTY-FIVE feet in depth; and such open space shall be increased FIVE feet in depth throughout its entire width for each additional story. No building of any kind shall be hereafter placed upon the same lot with a dwelling so as to decrease the minimum sizes of courts or yards as hereinbefore prescribed. No building other than a dwelling or a building intended for the use of the occupants of the dwelling and so used shall hereafter be erected on the same lot with a dwelling.³ Such building may be erected at the rear lot line, provided it does not exceed two stories in height and that the space between it and all other buildings on the lot is maintained as above provided. If any dwelling is hereafter erected upon any lot upon which there is already another building, it shall comply with all the provisions of this act, and in addition the space⁴ between the said building and the said dwelling shall be of such size and arranged in such manner as is prescribed in this section, the height of the highest building on the lot to regulate the dimensions.

NOTE 1: This section deals with the evils of lot overcrowding, caused by the erection of many buildings upon the same lot. In some cities where deep lots prevail as many as three or four separate buildings are sometimes found upon the same lot. In some cases all these separate buildings are used for dwelling purposes, generally as tenements. The evils of the rear tenement have been so often rehearsed that

Explanation

they need not be repeated here. It is obvious that if several buildings are to be placed on the same lot the relation of each building to the other must be carefully considered and nothing must be permitted that would jeopardize the maintenance of proper open spaces for all of the buildings. From an ideal point of view many people would wish to prohibit by law the erection of a building upon the rear of a lot upon which there is a dwelling in front, but reflection shows that this is not feasible. Where lots are deep and a system of alleys prevails the owner must necessarily have more than one building on his lot if he is to utilize his land to its full commercial development. Moreover, any appropriate scheme for the treatment of alleys and their elimination as sources of evil must contemplate the erection of dwellings fronting upon the alley. When we come to the consideration of private dwellings it is at once apparent that the owners of high-class private dwellings must be permitted to have garages, private stables, and similar buildings at the rear of their lot. This is the only place for them.

NOTE 2: It appears, therefore, that several buildings on the same lot are an inherent necessity in many cases. The important thing is to see that they are

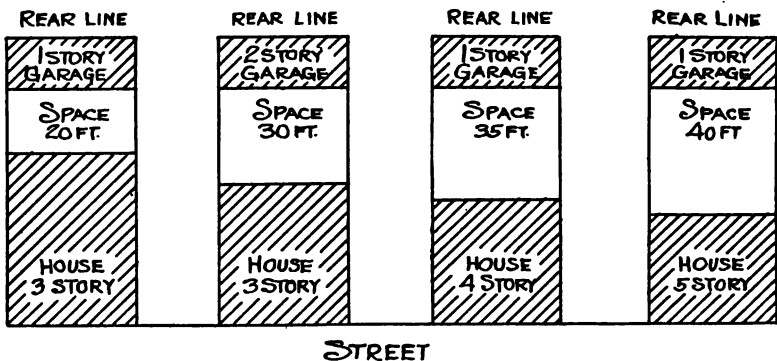


FIGURE 23
SPACE REQUIRED BETWEEN BUILDINGS

not constructed so as to become an evil. This section automatically prevents this by requiring in all such cases that the open space between buildings shall be of sufficient size. In discussing this whole

question we are discussing the situation where one building is located at the rear of the other, not where two buildings are side by side. That will be considered later. Where the two buildings are located one behind the other, the minimum space required to be left unoccupied between the buildings is 20 feet. This applies even to the case of one-story structures, out-houses and sheds of any kind that the owner may desire to construct. All of them must be kept 20 feet away from the rear wall of the dwelling. Where both of the buildings are over one story in height, the distance between the buildings is required to be 30 feet, and if one of the buildings is four stories in height the space between them must be 35 feet, and must increase 5 feet for each additional story. The above diagram illustrates the different conditions which obtain.

NOTE 3: It will be noted that in this section the erection of any building other than a dwelling is prohibited on the same lot with a dwelling, with the exception that a building intended for the use of the occupants of the dwelling and so used may be erected. This is an attempt to preserve the residence character of residence districts and to exclude from close proximity to dwellings the various kinds of commercial buildings, factories, stables, garages, and buildings of a similar kind which in such locations constitute a nuisance and render life extremely objectionable to the occupants of the dwelling. This also in the case of a tenement house would prohibit a factory at the rear of a tenement house lot. In some cities this has been quite a common type of construction where an old tenement at the rear of the lot has been turned into a sweatshop—a condition highly objectionable both from the point of view of the welfare of the occupants of the tenement house and also of the workers in the factory.

While buildings of this class have been prohibited, permission for the erection of buildings for the use of the occupants of the dwelling has been deliberately given. The advent of the automobile makes this necessary. In most of our cities every dwelling that is erected by a man of any means must have a garage adjoining it for the housing of his automobiles. Similarly, private stables to house the horses and carriages of the occupant of the mansion must be

permitted. Self-interest will indicate the location of such stables at a sufficient distance from the house to prevent any nuisance. There are also other classes of structures which the owners of dwellings may desire to have erected on their lot; a workshop where a man who is interested in carpenter work can employ himself as a means of recreation; a private laboratory for a scientist who may wish to make his own studies near his home; a children's play house, and similar types of structures that will readily occur to everyone.

While the private garage and private stable are permitted on the same lot, the public garage and public stable which are distinct nuisances, have been excluded.

NOTE 4: Reference has been made in note 2 to the case of two buildings that may be located side by

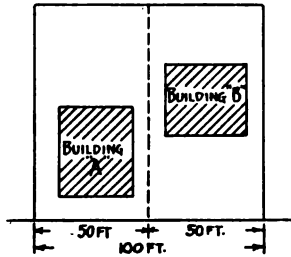


FIGURE 24

side upon the same lot. The provisions of this section are not intended to apply to such cases. This is inherently the same situation as two adjoining buildings on different lots with side yards between them, and the open space between the buildings should be treated as side yards and regulated in that way. This is done at once, automatically, if the owner, for purposes of the law and the record, divides his lot and treats it as two lots. Then each building has relation to its own particular lot. This is an option which most owners will gladly seize, as it will impose upon them less onerous requirements than would be imposed if the open spaces required by section 28 were made to apply to this class of courts.

NOTE 5: Some confusion has arisen with regard to the treatment of corner lots where it is desired to place

one building fronting on one street, which of course will be directly behind the building fronting on the other street. It is not intended to require an open space of 30 feet to be maintained between such buildings, and in such cases the owner should, as suggested in note 4, divide his lot into two lots, for the purposes of the record, and treat each building as on a separate lot.

§ 29. ROOMS, LIGHTING AND VENTILATION OF.¹ In every dwelling hereafter erected every² room³ shall have at least one window opening directly upon the street, or upon a yard or court of the dimensions specified in this article and located on the same lot, and such window shall be so located⁴ as to properly light all portions of such rooms. This provision shall not, however, apply to rooms used as art galleries,² swimming pools, gymnasiums, squash courts or for similar purposes, provided such rooms are adequately lighted and ventilated by ventilating skylights in the roof thereof.

NOTE 1: This section taken with the sections regulating the size of open spaces is the keystone of the arch of the law. It is obvious that we should permit no dark rooms to be built in future dwellings. Especial note should be taken of the phrase that the open space is to be of the dimensions specified in this article and also that it is to be located on the same lot.

Explanation

NOTE 2: No room in which people live, not merely one in which they sleep, should be dependent for its sole light and ventilation upon a ventilating skylight. Human beings need more than light and air. They must have outlook. Rooms of the type described are little better than prison cells, and yet notwithstanding these considerations architects will be found who wish to construct rooms of this type for servants. It should not be permitted. In the case of private dwellings there are types of rooms such as have been enumerated in the last sentence of this section; namely, art galleries, swimming pools, squash courts, etc., where the requirement for a window might interfere with the primary purpose of the room. This would certainly be the case with art galleries. It will

do no harm, therefore, to permit roof lighting and ventilation in lieu of windows in such cases.

NOTE 3: The question will be raised as to whether this provision applies to pantries and clothes closets. Neither of these is a room, and the law is not intended to require windows in clothes closets. They would be objectionable there. A window in a butler's pantry is very desirable but it is not always practicable to provide it and such a provision in the law would materially complicate the planning in many cases. It is not advisable, however, to put into this section a specific exception stating that windows are *not* required in butler's pantries and clothes closets, as it might have the effect of suggesting to some of the unscrupulous architects who plan multiple dwellings a method of evading the requirements with regard to lighting of rooms by marking the rooms "closets" and "pantries" for purposes of getting the plans passed and then after the dwelling is erected, building dark bedrooms. It can safely be left to the enforcing officials to distinguish between the *bona fide* pantry or clothes closet and the "fake" one.

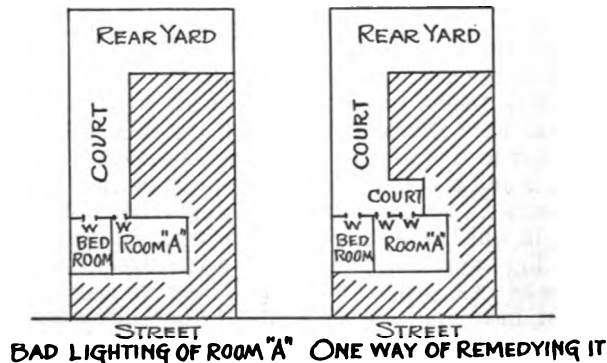


FIGURE 25

NOTE 4: The requirement that the windows "shall be so located as to properly light all portions of such rooms" has been found necessary in some cities, especially in the case of multiple dwellings where a room is located with a window at the extreme corner of it opening on some court with the result that there are portions of the room which are too far removed

from the light and are dim and shadowy. This requirement enables the enforcing officials to refuse to approve the plans where such conditions exist. (See Figure 25).

NOTE 5: It should be noted that the provisions of this section will fully safeguard conditions where it is permitted to cover over yards or courts, or a portion of them, on the ground floor. Nothing in such permission would give the right to construct rooms on the ground floor which do not have windows opening on an open space of lawful size.

NOTE 6: In some cities where owing to high land values the necessity for concentrated housing exists, types of multiple dwellings have been evolved in which there are on each floor one or several so-called "interior apartments," which have all their rooms opening either on a court or on the side yard. It is believed by some that it is bad for people to live in such homes, without outlook on either street or rear yard. Certainly such apartments cannot have as adequate ventilation as those on the street or yard. If it is desired to prohibit these inside flats, the following variation is suggested. Add at the end the following:

VARIATION 1: "In multiple-dwellings of Class A hereafter erected there shall be no apartment, suite or group of rooms which does not contain at least one room opening directly upon the street or rear yard." **Variation**

§ 30. WINDOWS IN ROOMS.¹ In every dwelling hereafter erected the total window area in each room² shall be at least ONE-SEVENTH of the superficial floor area of the room, and the whole window shall be made so as to open in all its parts.³ At least one such window shall be not less than twelve square feet⁴ in area between the stop beads. In multiple-dwellings the top of at least one window shall be not less than seven feet six inches above the floor.

NOTE 1: This is an attempt to assure sufficient light and ventilation in all rooms. It will only operate in the case of very large rooms or where an attempt might be made to evade the law by constructing a long room and later subdividing it. In this event more ample **Explan-**
ation

window space should be provided. It will be seen at a glance that there is nothing in this section that can be deemed a hardship by anyone. In the case of a bedroom of 90 square feet the window would have to be a little over 12 square feet in area, which is about the usual size. That would give a window $2\frac{1}{2}$ feet wide and 5 feet high.

NOTE 2: The provisions of this section are not intended to apply to bathrooms and water-closet compartments. That subject is treated under section 35.

NOTE 3: The phrase "in all its parts" means that the whole window shall open. If the window is a "double-hung" sash, both halves must open fully. If the window is a casement window or hinged sash, the whole window will naturally open. Similarly, if it is a pivoted sash.

NOTE 4: The establishing of 12 square feet as a standard does not mean that a room cannot have windows less in size than this but that there must be at least one window of that size in a room. This would permit such further ornamental treatment as may be desired with oval or fan-shaped windows or windows of irregular size, for architectural effect.

§ 31. ROOMS, SIZE OF.¹ In every dwelling hereafter erected all rooms, except water-closet compartments and bath-rooms, shall be of the following minimum sizes: Every room shall contain at least NINETY square feet of floor area; no room shall be in any part less than SEVEN feet wide.² In multiple-dwellings of Class A in each apartment, group or suite of rooms there shall be at least one room containing not less than ONE HUNDRED AND FIFTY square feet of floor area.³

Explanation

NOTE 1: Just as it has been found necessary to regulate the minimum dimensions of open spaces to furnish light and ventilation, so it has been found equally necessary to establish the minimum dimensions of rooms, as it has happened that unscrupulous speculative builders, especially in the case of tenement houses, and in many cities also in the case of apartment houses, have built rooms extremely small in order to pack people in as closely as possible and thus increase profits. The tendency has been especially

manifest in the case of servants' rooms in high class apartment houses, the theory having apparently been that servants are not human. The standard of 90 square feet as the irreducible minimum for all rooms, whether bedrooms or any other kind, seems reasonable. Outside of such cities as New York no objection should be raised to this standard. In fact, it will be found that most dwellings that have been erected in recent years have rooms considerably larger than this. There will be one or two individuals, however, who think this standard too high. It is misleading to consider this question without a full realization of what a room 90 square feet in area is like to *live* in, because in many multiple dwellings the individual bedrooms are really the living rooms of the persons who sleep in them. It is especially so in tenements where as a rule more than one person sleeps in each bedroom—

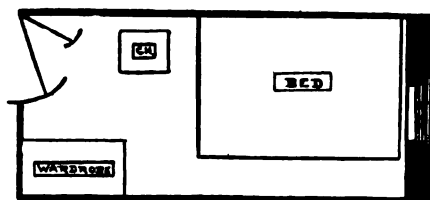


FIGURE 26
ROOM WITH FURNITURE IN IT

sometimes several people. A room 90 square feet will seem a pretty good sized room on a plan, but the room assumes less desirability when considered, as it must be, with the various articles of furniture in it which are usually found there. Even a room 90 square feet in area after a clothes closet or wardrobe has been built into it, thus taking 6 square feet of the floor area away, seems less commodious when a double bed, a bureau, a wash-stand, a chair, a small table, and a trunk are placed in the room.

NOTE 2: It would seem that it should be unnecessary to impose a minimum width of room, but experience in several cities has shown that many architects and builders have been willing to build rooms of the most outrageous type—rooms that look more like long corridors or sleeping-car effects than like living rooms. These have been chiefly in tenement houses

or servants' rooms in apartment houses. In order to prevent this it has become necessary to establish a minimum beyond which they shall not go. Seven feet is little enough.

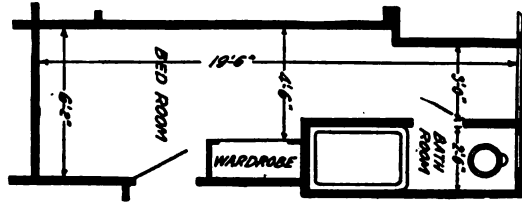


FIGURE 27
NARROW SERVANT'S ROOM

NOTE 3: The requirement that in the case of apartment houses, flats, and tenement houses there shall be in each apartment one room containing 150 square feet of floor area is for the purpose of insuring one living room of a reasonable size to permit proper family life. The law does not attempt to say which room this shall be. That is left to the architect and owner. The room may be the parlor or again it may be the dining room or kitchen. In the case of tenements it is of course obvious that it is unreasonable to require each flat to have either parlor or dining room. The ordinary tenement has neither. It is all the more important, therefore, in that class of buildings to have the kitchen or living room a reasonable size.

§ 32. ROOMS, HEIGHT OF.¹ No room² in a dwelling hereafter erected shall be in any part less than NINE feet high from the finished floor to the finished ceiling.

Explanation

NOTE 1: The minimum height of 9 feet herein established is the proper height to insure adequate ventilation, especially in multiple dwellings. The custom of building houses with rooms 8 feet high and 8 feet 6 inches high will be found to prevail in many communities, and opposition to this requirement out of all proportion to its merits may be felt. The saving to the builder because of this difference in height is a negligible quantity. In the case of private dwellings some owners may, because they like a low room, want

to have their rooms not more than 8 feet 6 inches high or even less. In view of these considerations, if considerable feeling develops, it will be wise to permit a lower height of ceiling in the case of private dwellings. The following concession is suggested. Substitute for section 32 the following:

CONCESSION 1: "§ 32. Rooms, Height of. No room in a private-dwelling hereafter erected shall be in any part less than eight feet six inches high from the finished floor to the finished ceiling. No room in a two-family-dwelling or in a multiple-dwelling hereafter erected shall be in any part less than nine feet high from the finished floor to the finished ceiling."

Concession

NOTE 2: The question will arise as to attic rooms and in many communities it will be strongly desired to permit the erection and use of attic rooms which have not the required height. Attic rooms are seriously objectionable. They are entirely unnecessary in multiple dwellings of any kind. They also should not be permitted in two-family dwellings. There is something, however, to be said for them in the case of private dwellings, provided the rooms are not used as living rooms. It sometimes happens that it is desired to have a billiard room, or a study, or den in the attic in a private dwelling, and a very attractive room can be made under these conditions. The danger, however, is that in permitting this, other things will be permitted which should not be permitted, and evils will creep in. It is almost impossible to regulate the use of a room after it is once constructed. It would take an army of inspectors stationed at the building to stop unlawful use. The only safe thing to do is not to permit the construction of rooms of an unsatisfactory type. It is strongly advised that no modification be permitted with regard to attic rooms. If, however, it is desired, the following concession is suggested: In Concession 1, after the words "eight feet six inches high from the finished floor to the finished ceiling," strike out the period, insert a comma, and insert the following:

Explanation

CONCESSION 2: "except that an attic room in such dwelling need be eight feet six inches high in but one-half

Concession

of its area provided such room is not used for sleeping purposes."

§ 33. **ALCOVES AND ALCOVE ROOMS.**¹ In a dwelling hereafter erected an alcove in any room shall be separately lighted and ventilated² as provided for rooms in the foregoing sections. Such alcove shall be not less than NINETY square feet in area.³ No part of any room in a dwelling hereafter erected shall be enclosed or subdivided⁴ at any time, wholly or in part, by a curtain, portiere, fixed or movable partition or other contrivance or device, unless such part of the room so enclosed or subdivided shall contain a separate window as herein required and shall have a floor area of not less than NINETY square feet.

Explanation

NOTE 1: This is a vitally important section. Unless enacted as drawn, all of the provisions of the law which seek to secure adequate light and ventilation in rooms will go for naught because windowless rooms without light or outside ventilation will be constructed in large numbers in the guise of "alcoves." The history of the experience of various cities on this point is instructive. In New York in 1901, in the desire to meet the views of architects building high grade apartment houses, an attempt was made to permit alcoves and a provision was formulated by the then Tenement House Commission seeking to do this and at the same time to safeguard the situation against the evils of dark rooms. It was provided that "where any room adjoins another room and has 80 per centum or more of one entire side open to another room and there is no door between, it shall be considered as part of the said room. Under other circumstances every alcove shall be deemed a separate room for all purposes within the meaning of this act."

Immediately the speculative builders building cheap tenement houses took advantage of this provision to break down the requirements prohibiting dark and unventilated rooms. Plans were filed for new tenement houses showing one room in an apartment with windows opening directly to the outer air and then as many as three alcoves opening from each of the other three sides of it; each alcove complying strictly with

this provision, having more than 80 per centum open to the outer room. The alcoves so constructed were to be used as bedrooms, adjoining the one light room. Thus at one step, the most serious evils of the type of tenement built forty years before were returned to. The law under such circumstances was manifestly impossible. It was at once amended at the earliest opportunity, but not before a few of these objectionable tenement houses had been built. The amended provision was more simple. It said "alcove rooms must conform to all the requirements of other rooms." Even this amendment, which was thought to be clear cut, definite and comprehensive did not turn out to be judge-proof! It would have seemed that under the terms of this provision it should not have been possible to evade the law and construct dark rooms in new tenements in the guise of "alcoves," but it was attempted; the public authorities at once brought legal proceedings to restrain it, and then a supreme court judge handed down a decision in which he sustained the attempt at evasion, the chief ground of this decision being that an "alcove" was a different thing from an "alcove room" and that the law did not deal with alcoves but with alcove rooms. Nothing short, therefore, of the concise, definite, categoric, and comprehensive language used in section 33 is adequate to deal with this question. Where similar provisions have been enacted it has not been found possible to find loopholes in them.

NOTE 2: The great objection to an alcove is that it is bound to be used as a separate room no matter to what extent it may adjoin another room nor how great an opening there is between them to permit light and air to enter. At best the room is sure to be too far away from the source of light and air and is sure to be shut off from the other room, if not by partitions then by curtains or portieres. This type of construction is in some respects worse than if a solid partition had been erected with nothing but a door in it and a totally dark room constructed, as the curtains or portieres are germ catchers and in the ordinary flat are seldom removed or cleaned. A permanent partition does not have these objectionable qualities. The chief objection, however, to this plan of construction is that it is sure to result in people sleeping or living in

rooms that do not have adequate light and ventilation.

NOTE 3: It should be carefully observed that nothing in this section prohibits the alcove treatment of rooms, which is often desired because of architectural effect. The architect is still free to utilize such treatment but with the important proviso that the alcove must have its own independent source of ventilation to the outer air and must not be less in size than the minimum size prescribed for rooms; namely, 90 square feet. This is no hardship as long as an architect knows in advance what he can do and what he cannot do and can adapt his plans accordingly.

NOTE 4: That the fear of alcoves being improperly used and dark rooms being created is not a fanciful one, is shown by the experience of the city of Brooklyn during one of the periods alluded to in note 1, when for a year or more the builders in that city constructed what were known as "wardrobe flats." Their scheme to beat the law was simple and ingenious. A builder would file a plan showing a flat two rooms in depth, each room 11 feet wide by about 30 feet long. One room would be marked "parlor" and the other "kitchen." In view of the wording of the law at that time, the public authorities were forced to accept these plans—though they had their suspicions as to what was contemplated—as each one of the rooms complied with the law, having windows to the outer air, one opening on the street, the other on the rear yard. What happened, however, was this: After the buildings were finished a wardrobe extending from the floor to the ceiling was erected half way down each of the rooms, in the rear room serving as the kitchen dresser and in the front room serving as a general clothes closet; these wardrobes extended entirely across the room in a direction parallel to the front and rear walls of the building, leaving the usual space for a passage way, practically a door opening, at one side. By this simple device the builder had created four rooms out of two and had two dark bedrooms in each flat. Fifty per cent of all the rooms were windowless and without either light or air, thus returning to the worst type of house that had been erected in that city and which had been outlawed some thirty years back. The houses were rented as "wardrobe flats." The

tenants of course did not know what had happened. Finding the flats for rent and seeing a certificate from the city department that the buildings complied with the law, as they did before these wardrobes were

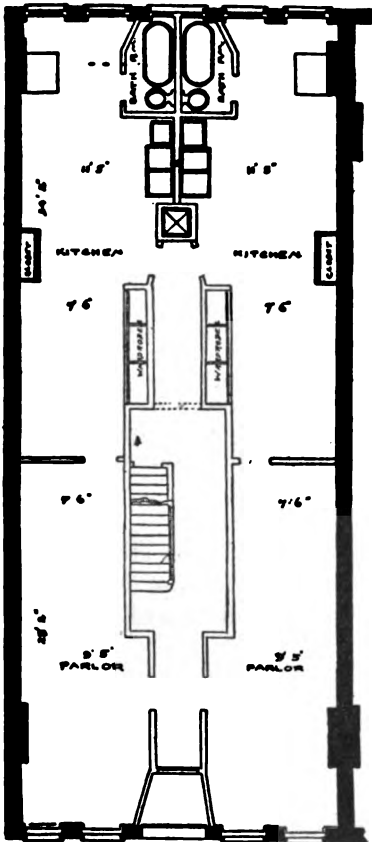


FIGURE 28

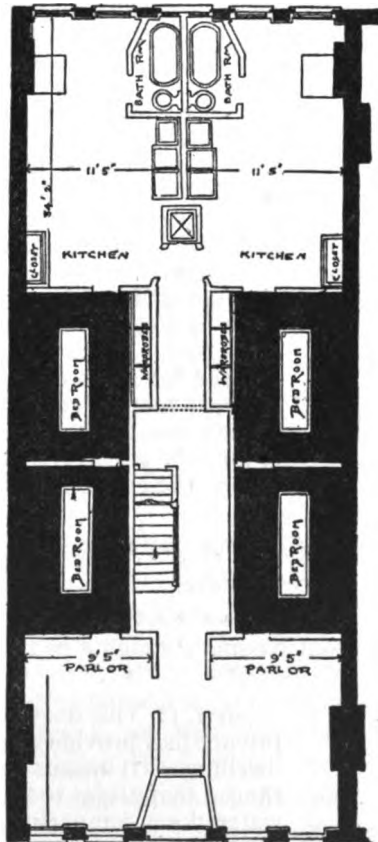


FIGURE 29

"WARDROBE FLATS"

erected, they rented the apartments. So skilful did the builders become in this device that they even went one step further and hinged these wardrobes so that when the city inspector should come to inspect the apartment the wardrobes would be swung back

against the kitchen or parlor wall as the case might be and thus be held to be a piece of movable furniture and not a permanent partition. The drawings on page 113 show clearly what was done. Figure 28 shows the plan as filed and approved. Figure 29 shows the changes that were made by the installation of the wardrobes.

NOTE 5: Care should of course be taken in enforcing this section, that it should not be done in a technical way, resulting in absurdities. Small recesses in rooms which are solely for architectural treatment, shallow in depth and not extending back from the wall more than a few inches, sometimes for the purpose of placing a piano, should of course be permitted. Common sense must be used in the enforcement of this section as well as in the whole law. The test is whether these slight recesses are susceptible of treatment as a separate room. If so, they should not be permitted. If the recess is very slight and cannot be used for a bed or couch or in any other way as a separate room it can do no harm to permit it. This is not a question that can be dealt with in the statute. It must be left to the intelligent interpretation of the law by the enforcing officials.

§ 34. PRIVACY.¹ In every dwelling hereafter erected, access to every living room and to every bedroom and to at least one water-closet compartment shall be had without passing through a bedroom.²

Explanation

NOTE 1: This does not mean that there must be a private hall provided for each apartment in multiple dwellings. It means that the rooms shall be so arranged that access to the bedrooms and to at least one water-closet compartment shall be either through the kitchen, parlor, library, dining room, or private hall if there is one. Nor does it mean that where there are several bathrooms and water-closet compartments access to every one of these shall be had without passing through a bedroom, but that there shall be at least one water-closet to which access may thus be had. This provision is made especially necessary in the case of tenement houses, because of the practice of tenants taking lodgers and boarders into their apartments.

NOTE 2: This provision does not mean that a bedroom cannot adjoin a water-closet or bathroom and have direct access to it. It simply means that people not utilizing that bedroom shall not have to pass through it to get to the water-closet. The following sketch shows what is meant. Access from bedroom No. 1 to the water-closet is lawful. Access from bedroom No. 2 through bedroom No. 1 is unlawful.

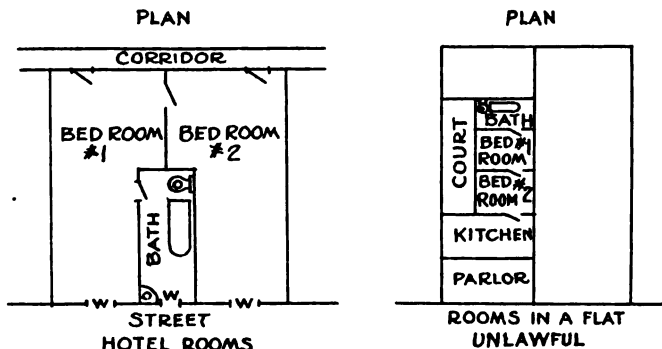


FIGURE 30

§ 35. WATER-CLOSET COMPARTMENTS AND BATH-ROOMS, LIGHTING AND VENTILATION¹ OF. In every dwelling hereafter erected every water-closet compartment and bath-room³ shall have at least one window opening directly² upon the street, or upon a yard or court of the dimensions specified in this article and located on the same lot. No such window shall be less in size than THREE⁴ square feet between stop-beads, and the aggregate area of windows for each water-closet compartment shall be not less than SIX square feet between stop-beads. Every such window shall be made so as to open in all its parts. Nothing in this section contained shall be construed so as to prohibit a general toilet room⁵ containing several water-closet compartments separated from each other by dwarf partitions, provided such toilet room is adequately lighted and ventilated to the outer air as above provided, and that such water-closets are supplemental to the water-closet

accommodations required by the provisions of section forty-five.⁶

Explanation

NOTE 1: This is an important phase of house planning concerning which many of our American architects need to be educated. Many of them apparently do not realize the vital importance of light and especially the germicidal effect of direct sunlight in water-closets, particularly in the homes of the poor. The importance of direct sunlight in water-closet compartments in all classes of buildings cannot be overstated. In tenement houses and single-family houses in which poor people dwell the greatest abuses are generally found in the dark water-closet. Conditions here are as a rule indescribable. It is because of this that most sanitary authorities have for years prohibited cellar water-closets. Even in the home of the educated and well-to-do person direct sunlight is essential in the water-closet and bathroom. If there is sickness in the family here is the danger of contagion, especially in cases of tuberculosis, typhoid fever, and so on, as the slop emptyings will take place in the bathroom.

NOTE 2: Equally important is the ventilation of such rooms directly to the outer air. Apparently few architects as yet know of the recent discoveries with regard to the principles of ventilation, which have completely reversed much that had previously been held on this subject. The average architect, it would seem, has not heard of the two vital principles necessary to insure proper health; namely, the prevention of excessive temperature and constant movement of the air. The best means of renewing the air is by a window. The only satisfactory method of securing movement of air is also by windows. No artificial system of ventilation that has been devised is equally satisfactory even when well installed and carefully managed and supervised. So far as tenement houses, flats, and apartment houses are concerned, the building community has apparently become accustomed to the requirement that water-closets in such buildings shall have direct means of ventilation to the outer air, but even here there are architects who would wish to construct water-closets entirely without such means, relying upon artificial light and

artificial systems of ventilation. It will not do, however, to permit any such sanitary standards to be adopted.

NOTE 3: This subject assumes especial significance in the case of the modern high-class hotel, in which practically every bedroom is provided with its private bathroom. A saving of space will undoubtedly result and the building can be planned with much greater ease and will present fewer problems to the architect if he can construct his bathrooms away from the outer walls and without direct ventilation. As the result of such saving of space more rooms can be provided and larger profits secured for the investor. The question is, therefore, in such buildings an important economic one. But the disadvantages of such a method of construction from a sanitary point of view far outweigh the commercial advantages. What determines the decision in this matter is not whether the investor can secure increased profits by this method of construction but whether the prohibition of the objectionable method of construction will have the effect of making it impossible to construct a building of this kind and have it commercially profitable. No one claims this nor could such claim be effectively sustained. There have been too many modern hotels of the very highest class erected in recent years in our largest cities where each bedroom has its own private bathroom and where every bathroom has direct outside ventilation to make any such claim tenable for a moment. From a sanitary point of view it is especially important that bathrooms and water-closets in hotels should have direct outside ventilation. The hotel from the point of view of spreading disease is far more dangerous than any other class of building because of its transient occupancy. A guest occupies a room; the landlord does not know that the guest is suffering from tuberculosis; he may be careless with his sputum and deposit it on the floor of the bathroom. If the bathroom is an "inside" room, there is no opportunity for the sunlight or air to get at the germs and kill them. Similarly with every communicable disease. The inside bathroom is objectionable from another point of view, in that it means excessive heat and no movement of air; that is, it presents the two methods of bad ventilation which are considered by present-day ex-

perts as representing the worst forms of the problem. No matter what system of artificial ventilation is provided, there is no adequate means of frequent renewal of the air nor any means of reducing excessive heat, owing to the steam vapor that arises from the hot water supply when a hot bath is drawn. The room is apt to hold for a long time an excessive amount of moisture and high temperature, all of which have a debilitating and injurious effect upon the system. In winter if the steam pipes run through such an inside bathroom it is practically impossible to cool it and it becomes extremely uncomfortable for the occupant of the room who is compelled to use it. For all these reasons there should be no hesitation whatever in opposing any plea for permission to construct inside bathrooms or water-closets in future hotels.

NOTE 4: It should be noted that the minimum area of window space required is 6 square feet. The practice heretofore has been to construct windows of bathrooms and water-closet compartments too small. Such small windows do not afford sufficient light or ventilation. There is no difficulty at all in constructing larger windows. It is simply a case of following the custom. From an architectural point of view the appearance of the front of the building is greatly improved by having the bathroom windows correspond to the other windows of the dwelling in size and arrangement. This is easily possible as bathrooms are always of sufficient width to permit it. The extra cost is but slight, as windows are generally as cheap as wall. This section does not permit any window less than 3 square feet. It requires 6 square feet of window surface in the bathroom or water-closet. The required window area may be in one window or in two.

NOTE 5: In hotels and similar multiple dwellings it is quite common to have general toilet rooms on the ground floor, or in the basement or cellar, or on some of the upper stories for the use of guests and the public. Unless special provision were made in this section, as is done in the last sentence, it would not be possible to have these general toilet rooms, as each water-closet compartment would have to be provided with a separate window. This is not necessary where a general toilet room is adequately lighted and ventilated to the outer air and where the individual

toilet compartments are separated by dwarf partitions. This exception as to the method of lighting and ven-

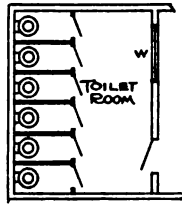


FIGURE 31

tilating water-closet compartments in no way affects the requirement that in certain kinds of multiple dwellings, namely, tenement houses, flats, and apartment houses, each family shall have its own private water-closet located within the apartment. This is governed by the provisions of section 45.

NOTE 6: It frequently happens, especially in the case of hotels, that it is desired to locate a group of water-closets at the bottom of a court which is covered over on the ground floor in this way and using as a roof to the water-closet compartment a ventilating skylight. Such a method of construction will provide adequate light and ventilation and should be permitted. If it is desired to permit courts to be built over on the ground floor and utilized in this way, the following concession is suggested. Add at the close of section 35 the following:

CONCESSION 1: "In hotels hereafter erected, in the case of water-closets located on the top floor or at the bottom of a court, a ventilating skylight open to the sky may be used in lieu of the windows required by this section." **Concession**

§ 36. PUBLIC HALLS.¹ In every dwelling hereafter erected every public hall shall have at each story at least one window opening directly upon the street or upon a yard or court of the dimensions specified in this article and located on the same lot. Such window shall be at the end² of said hall with the natural direction³ of the light parallel to the hall's axis. Any part of a public hall which is offset or recessed⁴ or shut off from any other part of said hall shall

be deemed a separate hall within the meaning of this section and shall be separately lighted and ventilated.

Explanation

NOTE 1: The evils of dark public halls, especially in tenement houses, can hardly be overstated. Darkness and dirt usually go hand in hand. This is especially true of the public parts of a building used in common by many individuals and with the responsibility for their care divided among several people. Where the light streams in, conditions of filth are seldom found as people are ashamed of such conditions when they are visible to themselves and to others. From the point of view of danger from the spread of communicable disease, light public halls are equally necessary. The germs of tuberculosis cannot live in strong sunlight more than a few moments, but have singular persistency in damp or dark places and live for a long time. From the point of view of public morals, dark public halls are equally objectionable. To them are directly traceable in numerous instances cases of grave immorality. Being open to the street as they are in the ordinary tenement house, they are entered by tramps and other irresponsible persons and all sorts of nuisances are frequently committed.

NOTE 2: The phrase "natural direction of the light" may seem puzzling at first. In the case of light coming from an inner court there is no natural direction of the light, as all the light comes over the roof. In the case of an outer court, however, the natural direction of the light is a line parallel to the axis of the court; that is, at right angles to the open end of the court.

NOTE 3: This provision will be held to be drastic by architects who are planning hotels, as the effect of it is to require a window at the end of the public hall so that the light and air may stream through all its parts, instead of permitting a window at one side. The reason for this is that the light that is thus received will only light a short part of the hall, nor will such a window permit free movement of the air. What is desired is light that will light every portion of the hall, and ventilation which will permit the air to blow through the hall and blow out all foul odors and completely renew the air. This is especially necessary in hotels where the public halls, as a rule, re-

ceive the foul air from the numerous bedrooms opening upon them. Owing to the transient nature of the occupancy of hotel rooms and the increased danger of the transmission of communicable disease, the public hall becomes a special danger point in buildings of this class. Heretofore the usual type of public hall in the high class hotel has been one that is quite dark, depending chiefly on electric light for its light and on artificial ventilation for its air. Such halls are as a rule stuffy and filled with odors. Recently hotel proprietors have begun to see the unwisdom of this type of construction and are providing better lighting and ventilation. The following diagram shows the

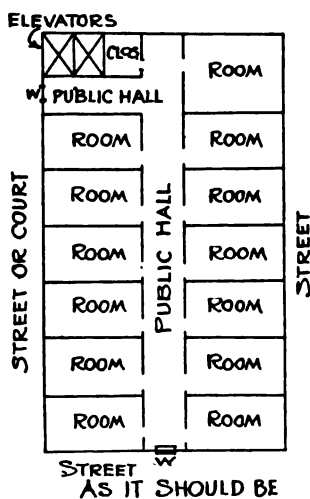


FIGURE 32

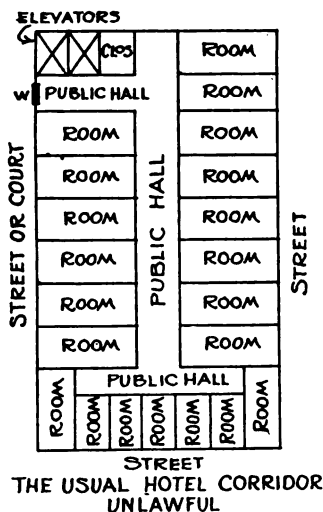


FIGURE 33

method of lighting and ventilating public halls made compulsory by this section (Figure 32), while Figure 33 illustrates the method of side lighting which is frequently employed and which is forbidden by this section.

NOTE 4: Particular objection, especially in the case of hotels, will be made to the last sentence of this section which requires any portion of a public hall running at an offset from the main hall to be treated as a separate hall and to be separately lighted and ven-

tilated. In the case of hotels this involves a sacrifice of floor space, as is at once seen by reference to the diagrams. Figure 33 shows the ordinary type of public hall frequently found in the modern high-class hotel. It will be seen that even where the main hall is properly lighted and ventilated by a window at the end, there are what may be termed side corridors giving access to numerous rooms which run in a direction at right angles to the main corridor and which have no means of light and ventilation other than artificial ones. It is definitely intended by this section to make this type of construction impossible in the future.

It will at once be seen that this involves a material sacrifice of floor space, yet if we are to have really proper ventilation and lighting of public halls in hotels nothing else can be permitted.

These considerations will not be found to apply to the same extent in other classes of buildings; in the case of both apartment houses and tenement houses, the plan will naturally be so arranged as to do away with long public halls because of the waste of space involved in such arrangement. In private dwellings and two-family houses there will be no public halls; the halls will be private halls and this section will therefore not apply to them.

If it is desired to make concessions to the persons interested in building hotels the following modification can be employed, although any change in this respect is advised against. After the words "parallel to the hall's axis," insert the following:

Concession

CONCESSION 1: "In the case of hotels hereafter erected, in lieu of the requirement for one window at the end of each hall, there may be windows located at the side of such hall, provided there shall be at least one such window in every twenty feet in length or fraction thereof of said hall; and each such window shall open directly upon the street or upon a yard or court of the dimensions specified in this article and located on the same lot."

§ 37. WINDOWS AND SKYLIGHTS FOR PUBLIC HALLS.¹ In dwellings hereafter erected one² at least of the windows provided to light each³ public hall or part thereof shall be at

least TWO FEET SIX INCHES wide and FIVE feet high, measured between stop-beads. In every multiple-dwelling hereafter erected there shall be in the roof directly over each stairwell, a ventilating skylight⁴ provided with ridge ventilators having a minimum opening of FORTY square inches, or such skylight shall be provided with fixed or movable louvres.⁵

NOTE 1: It should be observed that this provision for ventilating skylights applies only to *public* halls. It will therefore not apply in the case of private dwellings and two-family dwellings. Explan-
ation

NOTE 2: This provision does not prevent any number of windows of a less size than the size prescribed if it is desired to have round, oval, or other shaped windows for architectural effect. All that it requires is that there shall be at least one window of the required size in each public hall.

NOTE 3: This limitation as to minimum size applies to each public hall; that is, to the hall at every story.

NOTE 4: It may be thought by some that if a public hallway is thus adequately provided with windows, a ventilating skylight in the roof is unnecessary. This view is erroneous. A ventilating skylight is needed in addition to the window ventilation for two reasons. First, in tenement houses and also in many flats, apartment houses, and even in hotels, hall windows will not always be left open with sufficient frequency to renew the air. The ventilating skylight insures always a certain amount of ventilation and the carrying off of the vitiated air. Second, the ventilating skylight is an important element in case of fire as it will allow the smoke and flames to be vented at the roof and will thus have a tendency to prevent the fire from "mushrooming" out on each floor and spreading laterally into the apartments and rooms.

NOTE 5: It will not do to require the louvres in the skylight to be fixed because in the case of a steam-heated hall this would mean the loss of all the heat. The law gives the owner the option of using either fixed or movable louvres. The louvre is a slat similar to those often seen in a church belfry. The amount of opening of 40 square inches provided in the ridge ventilator will be found to be very small and

will not in any way interfere with the plan of maintaining steam-heated halls where that is desired, and yet this amount of opening will insure a certain amount of continuous and permanent ventilation of the hall.

§ 38. WINDOWS FOR STAIR HALLS, SIZE OF.¹ In every multiple-dwelling hereafter erected there shall be provided for² each story at least one³ window to light and ventilate each stair hall which shall be at least THREE feet wide and FIVE feet high, measured between the stop-beads. A sash door⁴ shall be deemed the equivalent of a window in this and the two foregoing sections, provided that such door contains the amount of glazed surface prescribed for such windows.

Explanation

NOTE 1: This provision applies to stair halls and is intended to secure separate and adequate means of lighting all stair halls irrespective of the means of lighting and ventilation provided for the public halls. The same considerations which apply to the maintenance of light conditions in public halls apply equally to stair halls with the additional fact that a light stair hall is essential if the stairs are to be used as a means of egress in case of fire.

NOTE 2: It should be noted that this requirement does not necessitate the window of the stair hall being *at* or on each story, but there must be one such window *for* each story; that is, the window may be on the stair landing, half way between the two stories throwing its light both up and down the stairs. This is an excellent type of construction and should be permitted.

NOTE 3: This provision does not interfere with the use of small oval, round or other irregular-shaped windows that may be desired for architectural treatment. All that it requires is that at least one window for each story shall be of the minimum size provided.

NOTE 4: It is often desired to use a French window treatment for architectural effect, also to use sash doors. Both of these forms of construction should be permitted provided the adequate amount of lighting and ventilation can be secured.

§ 39. OUTSIDE PORCHES.¹ In dwellings hereafter erected,

roofed-over outside porches which extend above the top of the entrance story shall not be erected outside of and adjoining windows required by this act for the lighting or ventilation of rooms or halls²; they may, however, open from windows supplementary to those required by law, provided they do not diminish the legal light or ventilation of such rooms. The term "outside porches" shall include outside platforms, balconies and stairways. All such outside porches shall be considered as part of the building and not as part of the yards or courts or other unoccupied area.³

NOTE 1: In a number of cities the outside porch has become more or less of a fixed habit. Such porches on the ground floor at the front or rear of a private dwelling are as a rule unobjectionable. Although they do to some extent darken the rooms from which they open, there are in such houses as a rule other windows for the rooms in question additional to those required by law. It will of course not do to prohibit outside porches. When extended up in the air, however, the outside porch becomes a serious evil. This, unfortunately, has become a firmly established type of construction in a number of cities, both in the case of two-family dwellings and also in tenements and flats. It is a common feature of the "three-decker," which is usually provided with a system of outside wooden balconies connected with wooden stairs at the rear of the building. The type is objectionable from a number of points of view. In the first place, the wooden balconies frequently extend so far from the rear wall of the building that they greatly darken the living rooms opening upon them, thus creating one or more dark or dim rooms on each floor. They are also very unsightly as they become a sort of "lumber room" and have stored on them the numerous articles that accumulate in a household. Here may be seen refrigerators, rocking horses, step-ladders, pails, baskets, boxes, and so forth. Being of wood and connected with wooden stairs and containing these accumulations of inflammable material, they are a distinct source of danger in case of fire. In parts of the country where the weather is severe in the winter,

Explana-
tion

the outside porches are frequently enclosed with glass and wooden partitions throughout five months of the year and in some cities are kept enclosed practically throughout the year. The result is that the rooms from which they open, which were erected as outside rooms and intended to have direct sunlight and fresh air, are deprived of both.

The one advantage claimed for this type of construction is that it enables people to sleep out of doors and to live out of doors more than they otherwise would. This is to some extent true. Careful observation, however, does not bear out the contention that these balconies are used to any great extent as sleeping porches nor do the members of the household use them much for living purposes in the day time except in the hottest summer months.

It is obvious that there is little use in setting down in the law with minute care the sizes of open spaces upon which rooms may open and the minimum dimensions of the rooms themselves in order to furnish proper light and ventilation to the people living in them, if at the same time it is possible to render nugatory all of these effects by the erection on the outside of the building of what is practically another room, shutting off light and air and thus turning outside rooms into inside rooms with neither proper light nor ventilation.

NOTE 2: It should be observed that this section does not prohibit the use of outside porches or stairs, but does require that they shall not interfere with the lighting and ventilation of rooms and halls.

NOTE 3: If concession 1 noted in subdivision 16 of section 2 is made, the following concession should be made here. In the last sentence after the word "porches" insert a comma and add the following:

Concession

CONCESSION 1: "except as otherwise provided in subdivision sixteen of section two,"

TITLE 2

SANITATION

§ 40. CELLAR ROOMS. In dwellings hereafter erected no room in the cellar shall be occupied for living purposes.

NOTE: Outside of the city of New York there is no city in the United States where it is necessary because of high land values and the pressure of population to permit new dwellings to be constructed with living accommodations in the cellar. Even under the best conditions cellar dwellings are injurious to humanity and should not be tolerated in future buildings. Cellars should be clearly differentiated from basements. For further discussion of this matter see notes under section 2, subdivision 13.

Explanation

§ 41. BASEMENT ROOMS. In dwellings hereafter erected no room in the basement shall be occupied for living purposes, unless in addition to the other requirements of this act such room shall have sufficient light and ventilation, shall be well-drained and dry, and shall be fit for human habitation.

NOTE: In the laws of some cities and states in the past, elaborate conditions have been prescribed with regard to the occupancy of basement rooms, certain fixed standards having been imposed as to the height of ceiling above the adjoining ground, the presence of an areaway in front of the room and certain other conditions. It does not seem necessary to impose these conditions upon basement rooms, provided they comply with the other provisions of the act and in addition have sufficient light and ventilation, are well drained and dry, and are fit for human habitation. If the rooms are *basement* rooms, their ceilings must be at least one-half of their height above the adjoining ground. Under the provisions of section 32, the

Explanation

rooms must be at least 9 feet high, and under the provisions of other sections of the act every such room must open directly upon the outer air and be of a certain minimum size. The sole value of this section, therefore, is to give to the enforcing officials a "drag-net" power to interfere with the construction and occupancy of basement rooms that may not be fit for human habitation even though they may comply with the other provisions of the act.

§ 42. CELLARS, WATER-PROOFING AND LIGHTING.¹ Every dwelling hereafter erected shall have a basement, cellar or excavated space under the entire entrance floor, at least THREE feet in depth, or shall be elevated above the ground so that there will be a clear air space of at least TWENTY-FOUR INCHES between the top of the ground and the bottom of said floor so as to insure ventilation and protection from dampness. Such space shall in all cases be enclosed but provided with ample ventilation and properly drained. Every dwelling hereafter erected shall have all walls below the ground level and the cellar or lowest floor damp-proof and water-proof.² When necessary to make such walls and floors damp-proof and water-proof, the damp-proofing and water-proofing shall run through the walls and up the same as high as the ground level and shall be continued throughout the floor, and the said cellar or lowest floor shall be properly constructed so as to prevent dampness or water from entering. All cellars and basements in dwellings hereafter erected shall be properly lighted³ and ventilated.

**Explan-
ation**

NOTE 1: Some of the worst conditions encountered in cities and especially in suburban and rural communities, arise from the practice in building small houses of setting them directly on the ground. This results in conditions of dampness which seriously affect the health of the occupants who constantly suffer from "rheumatism" and other diseases. In many sections during the stormy weather these rooms become flooded and the tenants are caused to suffer not only great discomforts and inconvenience but

often serious injury to health. This requirement is to obviate this situation. It should be noted that a cellar is not required in every case. Where a cellar is not provided, however, the building must be lifted above the ground at least 2 feet so as to prevent dampness. This space is required to be enclosed chiefly to prevent it from becoming a gathering space for waste materials of various kinds but at the same time the space is required to be left sufficiently open by means of grilles or latticework or in some other way so that it may be properly ventilated.

NOTE 2: The requirement that the walls below the ground level shall be damp proof and waterproof is frequently misunderstood and thought to mean that some special system of damp proofing or waterproofing shall be applied. This is not the case. The words employed mean what they say; namely, that the walls and floors shall *be* damp proof, not that they shall be *made* damp proof. In other words, where the natural soil conditions are such as to insure freedom from dampness in walls and floor, no special methods of damp proofing are necessary, but where the soil conditions are not of this nature then appropriate precautions must be taken to prevent dampness in the

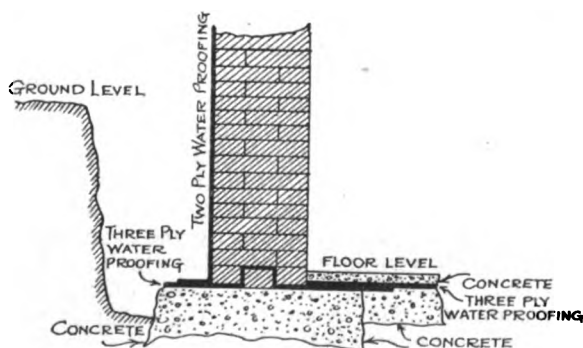


FIGURE 34

DAMP PROOFING OF WALLS AND FLOORS

walls and lowest floor. The methods of damp proofing that are most frequently employed where it is necessary to do such work are very simple and consist of courses of tar paper and hot tar properly ap-

plied. There are also other methods commercially in use that are quite wellknown. There is no difficulty in making cellar walls and floors damp proof by such methods except in cases where there is water pressure below, due to tidal effect. In such cases the problem becomes somewhat complicated. It is necessary then to keep the water out by weighting it down by means of inverted arches or other devices; but the ordinary housing reformer will not encounter this contingency in one case out of ten thousand. The above diagram shows the method of damp proofing employed where it is necessary to use any process.

NOTE 3: The requirement that cellars and basements shall be properly lighted and ventilated is of great importance. In the case of the dwellings of the poor the three danger points are the water-closets, public halls, and cellars; that is, the parts of the building used in common and for which no single individual is as a rule responsible. Cellars are a special danger point and are apt to become filled with waste material of various kinds, the accumulation of which is injurious both to the health and safety of the occupants. This situation is likely to occur where cellars are not properly lighted. A large proportion of tenement house fires originate in such cellars. The health of the occupants also is bound to suffer materially from living over cellars which are not properly ventilated. Dampness is very likely to result from such a condition and the building is likely to be filled with unpleasant and unhealthful odors.

In order not to restrict the architect unnecessarily in the planning of his building, it has not been attempted to lay down any precise and exact method of lighting and ventilating the cellar which must be employed. This is left to the enforcing officials who can be counted upon to see that the cellar is properly lighted and ventilated.

§ 43. COURTS, AREAS AND YARDS.¹ In every dwelling hereafter erected all courts, areas and yards shall be properly graded and drained,³ and when required by the health officer they shall be properly concreted² in whole or in part as may be appropriate.

NOTE 1: The purpose of this requirement is to insure adequate drainage and to keep water from standing in puddles in the yards or from seeping into the walls of the building, thus creating conditions of dampness in the cellar and other lower portions. The desirable condition is to require yards, areas, and courts to extend down below the level of the cellar floor and to be connected with the street sewer. In many cities, however, this is seriously objected to as unnecessary expense, requiring as it would, the excavation of the yard down to this lower level. It is also the custom in many cities to discharge the rain water from the house leaders directly on the ground, and the expense of conducting this to the street sewer is felt to be unnecessarily onerous. It is believed that the provision as written in this section will meet the situation in most cases and will do so with a minimum of friction.

Explanation

NOTE 2: It will not do to require yards, courts, and areas to be concreted throughout, as in many cases it is desired to have such yards treated with grass plots and flower gardens. There are, however, numerous instances where this treatment is not had and where it is desirable from the point of view of proper drainage and cleanliness to have the yard concreted. In such cases the health officer will be empowered under this section to make this requirement.

NOTE 3: If it is desired to stiffen this section and impose more stringent requirements, the following variation is suggested. Insert at the beginning of this section, after the caption, the following:

VARIATION 1: "In every dwelling hereafter erected where courts, areas or yards extend to the basement or cellar, a portion of such court, area or yard not less than two feet wide shall extend down below the floor level of said basement or cellar."

Variation

NOTE 4: If it is desired to require that such open spaces shall be connected with the street sewer, the following variation is suggested. After the words "graded and drained" in the original section, insert the following:

Variation

VARIATION 2: "and connected with the street sewer so that all water may pass freely into it"

§ 44. WATER SUPPLY.¹ In every dwelling hereafter erected there shall be a proper sink or wash-bowl with running water, exclusive of any sink in the cellar.² In two-family-dwellings and in multiple-dwellings of Class A there shall be such a sink or wash-bowl in each apartment, suite or group of rooms.³

Explanation

NOTE 1: This requirement is for the purpose of securing an ample supply of running water inside the dwelling in future buildings and to prevent the unsanitary conditions which prevail in many cities where in the older buildings there is no water except such as can be obtained from a hydrant or pump in the back yard. Sometimes there is but one hydrant for many houses.

NOTE 2: The sole water supply in future dwellings should not be located in the cellar, as this is too inconvenient a place for family use.

NOTE 3: In private dwellings the sink or wash bowl may be located in any room or even in the hall of the house (except the cellar), but in two-family houses and multiple dwellings there must be one such sink or wash bowl for each family.

NOTE 4: This section must be read in connection with section 7. Where there is no communal water supply in a community, section 44 will not apply.

§ 45. WATER-CLOSET ACCOMMODATIONS.¹ In every dwelling hereafter erected there shall be a separate² water-closet. Each such water-closet shall be placed in a compartment completely separated from every other water-closet; such compartment shall be not less than THREE feet wide,³ and shall be enclosed with partitions which shall extend to the ceiling⁴ and which shall not be of wood or other absorbent material. Every such compartment shall have a window opening directly upon the street or upon a yard or court of the minimum sizes prescribed by this act and located upon the same lot.⁵ Nothing in this section contained shall be construed so as to prohibit a

general toilet-room⁶ containing several water-closet compartments separated from each other by dwarf partitions, provided such toilet-room is adequately lighted and ventilated to the outer air⁷ as above provided, and that such water-closets are supplemental to the water-closet accommodations required by other provisions of this section for the tenants of the said house. No drip trays⁸ shall be permitted on any water-closet. No water-closet fixture shall be enclosed⁹ with any woodwork. No water-closet shall be placed out of doors.¹⁰ No water-closet shall be placed in a cellar¹¹ without a written permit from the health officer. In two-family-dwellings and in multiple-dwellings of Class A hereafter erected there shall be for each family a separate water-closet constructed and arranged as above provided and located within each apartment, suite or group of rooms. In multiple-dwellings of Class B hereafter erected there shall be provided at least one water-closet for every FIFTEEN occupants or fraction thereof. Every water-closet compartment hereafter placed in any dwelling shall be provided with proper means of lighting the same at night.¹² The floor of every such water-closet compartment shall be made water-proof¹³ with asphalt, tile, stone, terrazzo or some other non-absorbent water-proof material; and such water-proofing shall extend at least six inches above the floor so that the said floor can be washed or flushed out without leaking.

NOTE 1: This section is of great importance and contains a number of considerations which should be fully understood. In the first place, it requires in future dwellings that the water-closets shall be indoors. Where there are no public sewers, systems of cesspools or other approved form of sewage disposal in vogue in rural and suburban communities will have to be adopted. The section of course will not apply where there is no water supply and must be read in connection with section 7. In such case privies will have to be tolerated until such time as water supply is provided.

NOTE 2: It is deliberately intended to prevent in

Explana-
tion

dwellings and in tenement houses and similar residence buildings any communal system of water-closets, as experience has shown that they are always abused. Each family is to have its own water-closet entirely within its own control, thus insuring freedom from the abuses which are generally found, greatly adding to the desirability of the apartments from a rental point of view, and materially aiding the landlord in placing responsibility for abuses when discovered.

NOTE 3: While it should not be necessary to fix a minimum width of water-closet compartment, it has been found necessary, as in some of our cities where land values are high, these compartments have been made just wide enough to take in the fixtures, sometimes less than 2 feet in width. Such conditions should not be tolerated.

NOTE 4: Unless partitions extend to the ceiling there cannot be proper privacy and separation of the sexes. This is essential to prevent many kinds of abuse. Wooden partitions are prohibited because of their absorbent nature, although plastered, stone, marble, slate, or metal partitions may be used.

NOTE 5: Each water-closet must have its independent means of lighting and ventilation and in this respect this section must be read in connection with section 35. It should be noted that this requirement as to partitions and the prohibition of wood does not apply to the case of a general toilet room such as is described in this section where the water-closets are separated by dwarf partitions which do not extend to the floor but are set up on legs. In such case wooden partitions may be used without any objection.

NOTE 6: It is necessary to provide specifically for general toilet rooms such as are found in hotels and sometimes in stores, especially saloons, located on the ground floor of apartment houses and tenement houses. There is no objection to this form of construction, provided these toilets are supplemental to those required for the use of the tenants and are adequately lighted and ventilated to the outer air.

NOTE 7: In the case of high-class modern hotels it will be found difficult to light and ventilate such toilet rooms to the outer air and architects may desire to employ electric light and artificial ventilation. Such

a method of construction is not desirable even in the case of this class of buildings and it is advised not to make any concession for them. If, however, it is felt to be desirable to yield to the wishes of these interests, the following concession may be made. After the words "provided such toilet-room is adequately lighted and ventilated," omit the following:

CONCESSION 1: "to the outer air as above provided"

Concession

NOTE 8: Drip trays are sheets of thin metal fastened between the wooden seat and the water-closet bowl and are intended to catch the drippings when the fixture is used as a urinal. They are antiquated and highly objectionable, as their effect is to keep a standing deposit of urine close to the wooden seat which soon becomes saturated and odoriferous.

Explanation

NOTE 9: The requirement that no water-closet fixture shall be enclosed with any woodwork is in line with the accepted practice in good plumbing work for the past twenty years. If the fixture is enclosed the space underneath it is sure to become dirty and often saturated with urine and other deposits, thus giving rise to sanitary evils. If the space is left open it will always be visible and will therefore be kept clean.

NOTE 10: The requirement prohibiting the placing of water-closets out of doors is of vital importance. There will be a difference of view as to the desirability of this in different sections of the country. In some communities it has been the custom for many years past to place water-closets out of doors. As a result of this practice some of our most serious sanitary evils have occurred. The outdoor water-closet is only slightly better than the privy vault. It has all the evils of the privy vault except the danger of soil contamination and pollution of the water supply. These, however, are evils not frequently encountered, as even where there is a local water supply it is generally so located that there is comparatively little danger from this cause. The chief danger from the privy vault is the spread of communicable disease through the medium of the common house fly. There is just as great danger from this in the case of the outdoor water-closet as there is from the privy vault. The other evils of the vault, namely, the disgusting condi-

tion in which outdoor fixtures are generally found and the resulting discomfort and serious effect upon the health of the people in the neighborhood, exist with equal force in the case of the outdoor water-closet. Located thus in a public place and easy of access to the casual passerby, the outdoor closet is bound to be abused and kept in a filthy condition. Except in the Southern states where there is a mild climate and where there is little danger from freezing, outdoor closets are generally out of commission through most of the winter, forcing the tenants to employ the "bucket" system, as there has not been developed as yet any really satisfactory device of anti-freezing fixture. In many cities in the North where outdoor closets are employed, a type of closet known as the "Philadelphia hopper" (because of its great use in that city) is usually employed. This is a long hopper water-closet, with all the evils of an extensive fouling surface which cannot be cleaned. The fixture is provided with a seat flush which operates by a valve, the water being released by pressure on the seat. The result is that when paper is left upon the seat and when snow sifts in, as it frequently does, the weight of the snow and wet paper starts the flush going and the water is kept running practically all the time, overflowing the toilet and making a skating rink out of the compartment and neighboring portions of the yard.

The evils of the outdoor closet are so great that under no circumstances should any compromise be made on this provision, either in the South or in the North. No city can call itself civilized which permits in its future work outdoor water-closets. The ultimate cost to the community resulting from such a system in the toll of disease and death is beyond calculation.

NOTE 11: The very worst conditions are usually found in cellar water-closets, due to the fact that they are apt to be located in the dark, without proper ventilation, and are generally accessible to any stray passerby and are therefore sure to be abused. The cellar water-closet is usually for these reasons kept in an indescribable condition. It will not do, however, to prohibit cellar water-closets outright, as they are necessary sometimes for the use of stores on the ground floor in tenements, flats, and apartment

houses and are especially necessary in hotels in the service quarters and also in many hotels in connection with barber shops, cafés and other rooms provided for the public. The requirement that no water-closet be placed in the cellar without a written permit from the health officer amply safeguards the community against the evils that have heretofore existed.

NOTE 12: It is obviously important that there shall be means of lighting water-closet compartments at night. It should be noted that this provision does not specify the means to be employed. Where electricity or gas is provided throughout the house these methods will naturally be furnished. In the quarters of the poor a kerosene lamp may be all that is possible.

NOTE 13: It is of importance that the floors of water-closet compartments shall be waterproof so that the whole water-closet compartment can be flushed out. This is necessary because of the fact that in the case of contagious disease the slop emptyings from the patient are emptied here. There are also apt to be drippings from the bowl when the fixture is used as a urinal and a wooden floor absorbing this soon becomes extremely objectionable. The only satisfactory scheme is a scheme that will permit the entire floor to be flushed out. In most cases such a waterproof floor will be provided, as the water-closet is generally located in the same room as the bath tub. It should be noted that cement as waterproof material is barred out because of its absorbent qualities. Terrazzo is a composition used everywhere. It is made of broken chips of marble and cement.

Objection may be made to this provision as imposing unnecessary expense upon working people who desire to build small dwellings for their own use. If this is found to be a serious objection, the following concession can be made. Before the words "The floor of every such water-closet compartment," insert the following:

CONCESSION 2: "In two-family-dwellings and multiple-dwellings hereafter erected" **Concession**

§ 46. SEWER CONNECTION. No multiple-dwelling shall hereafter be erected on any street unless there is city water-

supply accessible thereto nor unless there is a public sewer in such street, or a private sewer connecting directly with a public sewer, and every such multiple-dwelling shall have its plumbing system connected with the city water-supply and with a public sewer before such multiple-dwelling is occupied. No cesspool or vault or similar means of sewage disposal shall be used in connection with any dwelling where connection with a public sewer is practicable.

**Explana-
tion**

NOTE: This provision applies only to multiple dwellings. It should properly apply to private dwellings and to two-family dwellings, but it is believed that this would be considered too drastic by practically every community. Theoretically no community should permit the erection of dwellings until streets have been sewered and supplied with city water, as otherwise privies are necessary, but such a provision would undoubtedly be felt to stop the progress and development of the city and become a check upon the building industry. We shall probably be sufficiently civilized twenty-five or thirty years from now to impose such a requirement, but it does not seem to be wise to attempt it at this time. The situation with regard to multiple dwellings is, however, totally different. No large building housing a number of families should be permitted to be erected in sections of the city not provided with sewers and water supply. If that portion of the city is so slightly developed that sewers and water supply cannot be provided, the multiple dwelling is not an economic necessity and single-family dwellings and two-family houses can be built with propriety.

§ 47. PLUMBING. In every dwelling hereafter erected no plumbing fixture shall be enclosed¹ with woodwork but the space underneath shall be left entirely open. Plumbing pipes shall be exposed, when so required by the health officer.² All plumbing work shall be sanitary in every particular and, except as otherwise specified in this act, shall be in accordance with the plumbing regulations³ of said city. All fixtures shall be trapped.⁴ Pan,⁵ plunger and long hopper closets will not be permitted. Wooden

sinks⁶ and wooden wash-trays will not be permitted. Tile⁷ or earthen-ware house drains will not be permitted. In all multiple-dwellings hereafter erected where plumbing or other pipes pass through floors or partitions, the openings around such pipes shall be sealed or made air-tight with incombustible materials, so as to prevent the passage of air or the spread of fire from one floor to another or from room to room.⁸

NOTE 1: The reasons against the enclosure of plumbing fixtures with woodwork have been fully set forth in note 9 of section 45. **Explanation**

NOTE 2: It is not wise to require plumbing pipes in all cases to be exposed, as in certain classes of buildings, namely, high-class apartment houses, hotels, and similar structures, the tenants and guests would not care to see the rough plumbing and would find it a detriment to the rooms. In the ordinary tenement house, however, and in other classes of dwellings, it is entirely possible to have many of the pipes exposed. It is therefore left to the health officer to determine under what circumstances this shall be required.

NOTE 3: No attempt is made here to go into minute details of plumbing requirements such as the weight of pipe, kind of material and the numerous other details that are commonly found in plumbing rules and regulations. This can safely be left to the plumbing rules and regulations of the locality affected. What has been done here is to set down the irreducible minimum so as to prevent the use of materials or methods which have been shown to be injurious from the point of view of proper sanitation.

NOTE 4: The requirement that all fixtures shall be trapped does not mean that each fixture shall be trapped separately, although this is desirable; this is left to the local plumbing regulations to determine.

NOTE 5: Pan, plunger, and long hopper closets are antiquated types of fixtures with large fouling surface which should not be tolerated in modern construction. In many cities where good plumbing practice prevails such closets are required to be taken out when found even though they may have been installed only a few years before. (See Figure 35 on next page.)

NOTE 6: Wooden sinks and wash trays are pro-

hibited because they become rotten and saturated, breed vermin, and become odoriferous.

NOTE 7: Tile or earthenware house drains are prohibited because they are in most cases liable to break in a short time, thus permitting soil contamination.

NOTE 8: The requirement that the spaces around pipes where they pass through floors in multiple

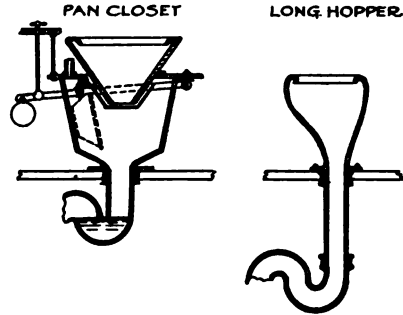


FIGURE 35
PAN AND LONG HOPPER CLOSETS

dwellings shall be made air tight is of importance not only for the convenience of the tenants in preventing unpleasant odors communicating from one apartment to another, in shutting off sounds which would otherwise travel in a similar way, and in preventing vermin thus getting from one apartment to another, but especially as a means of reducing fire danger and preventing the transmission of contagious disease.

FIRE PROTECTION

TITLE 3

FIRE PROTECTION

NOTE 1: There is much misunderstanding in the popular mind as to the relative importance of fire protection provisions as compared with the necessity of adequate open spaces. From an ideal point of view it would be incalculably better for the community if all houses erected in the future might be fireproof throughout. It would add greatly to the beauty of our cities, it would help conserve our forests by reducing the consumption of lumber, and would insure greater safety to the great mass of our population, though the danger from fire is more of a prospective evil than a real one. Considering the size of the population in each of our cities, the number of people who lose their lives each year from this cause is practically negligible. This is due, however, not to the methods of construction employed in our buildings but to the efficiency of our fire departments. The real advantage of having all buildings fireproof would be in the ultimate saving to the investor. Bills for insurance would be reduced to almost nothing and the cost of upkeep would be very materially diminished.

The great objection, however, to requiring all dwellings erected in the future to be fireproof throughout is that the cost at present would be prohibitive. The effect of this so far as the dwellings of the working people are concerned would be to augment greatly the cost of living. The time will undoubtedly come, and it is not far distant, when the cost of fireproof construction will be greatly reduced and this desirable ideal can be accomplished. For the present, however, in view of the considerations expressed, it seems unwise to attempt to bring about such a condition.

NOTE 2: It should be noted that all of the provisions of this title, which deals with fire protection in new buildings, with the exception of section 50, relate

solely to multiple dwellings. That is, none of these additional precautions which are very necessary in the case of multiple dwellings are imposed upon private dwellings or two-family dwellings. The effect of this discrimination will be to make as cheap as possible the construction of private dwellings and two-family dwellings and therefore to encourage that type of development in our cities; while the imposing of these additional safeguards at additional cost upon multiple dwellings should have the effect of discouraging the erection of such buildings. The requirements imposed are in no sense prohibitive; multiple dwellings can still be erected in any city and be commercially profitable. Nor has any requirement in this title been imposed upon multiple dwellings solely with the idea of discouraging that type of construction; each provision will be found to be justified from experience and to be necessary for buildings of this class.

§ 50. FIREPROOF DWELLING, WHEN REQUIRED.¹ No dwelling shall hereafter be erected exceeding THREE² stories in height, unless it shall be a fireproof dwelling; the building, however, may step up to follow the grade, provided no part of it is over THREE³ stories in height.⁴

**Explan-
ation**

NOTE 1: The purpose of this section is a two-fold one. While it is primarily a provision for fire protection and would have to be justified on that ground if attacked in court, it is also of great importance in securing better light and ventilation and as a means of preventing congestion of population in the case of multiple dwellings. The way to prevent land overcrowding is to limit the number of people that may live on a given area of land. This can be done more effectively indirectly than it can directly. There is some doubt as to whether the courts would sustain an arbitrary limitation on the actual number of people that might live on a lot of a given size. If, however, the area of the building is limited by requiring large open spaces and the height of the building is limited, the result desired has been accomplished and by a method which the courts will unquestionably sustain. While there is no guarantee that this provision will

absolutely prevent the erection of tall buildings, it is reasonably sure that at the present time, with the cost of fireproof construction as it is to-day, the effect of this provision will be to discourage greatly their erection.

NOTE 2: The standard has been set at three stories, but it should be noted that this is a variable standard to be changed in each city to suit the local conditions. It is highly desirable to keep residence buildings down to a three-story height. Where this is not practicable the standard should be changed to four, but no residence building should be permitted to be built higher than four stories without being made completely fireproof; namely, constructed with iron beams and girders and incombustible floors and partitions, as defined in section 2, subdivision 17. If local conditions indicate the necessity of permitting four-story buildings, the following concession may be wisely made:

CONCESSION 1: Change "THREE" to "FOUR" in **Concession** both instances where it occurs in this section.

NOTE 3: This section must be read in connection with the definitions of cellar and basement as contained in section 2, subdivision 13. In other words, if the standard is set at three stories, a three-story and basement building will have to be fireproof; a building three stories and cellar in height will not. This is deliberate, as the basement type of building is not a desirable one to encourage for many reasons. Where a basement is erected it means that the basement part is to be used for living purposes and the equivalent of a four-story building is in most cases likely to result. **Explanation**

NOTE 4: This provision will work no hardship to any class of building, especially if the standard is made four stories. The millionaire's mansion will in no case be over four stories high. Apartment houses and similar multiple dwellings that are erected over four stories high should be fireproof. Hotels over that height would be fireproof anyhow and no one would seek any concession in this direction.

§ 51. MEANS OF EGRESS.¹ Every² multiple-dwelling here-

after erected exceeding one story in height shall have at least two independent³ ways of egress which shall extend from the ground floor to the roof, and shall be located remote from each other, and each shall be enclosed by walls or partitions as provided elsewhere in this act. One of such ways of egress shall be a flight of stairs² constructed and arranged as provided in sections fifty-four, fifty-five and fifty-six of this act. In multiple-dwellings of Class A the second way of egress shall be directly accessible⁵ to each apartment, group or suite of rooms without having to pass through the first way of egress. In multiple-dwellings of Class B⁶ the second way of egress shall be directly accessible from a public hall. The second way of egress may be any one of the following, as the owner may elect:

1. A system of outside balcony fire-escapes constructed and arranged as provided in section fifty-two of this act.
2. An additional flight of stairs, either inside or outside,⁹ constructed and arranged as provided in sections fifty-four, fifty-five and fifty-six of this act.
3. A fire-tower⁴ located, constructed and arranged as may be required by the superintendent of buildings.¹¹

**Explan-
ation**

NOTE 1: The plan adopted here differs from the plan which has heretofore been embodied in many of our tenement house laws; namely, a requirement for fire-escapes upon multiple dwellings of a certain class. Instead of this it has been thought better to adopt the practice which has been coming into favor more generally in recent years of requiring two ways of egress.

NOTE 2: The chief purpose of this is to enable the occupants of the building to have quick egress in case of fire by a means other than that used ordinarily. It is of course essential that these two ways of egress shall be independent of each other. It is equally important that they shall extend from the entrance floor to the roof so that in case egress is cut off on the ground floor, access may be had to the roof of the building and from there to the roofs of adjoining buildings, when they do adjoin. It is also obvious that access must be had to the street entrance, as otherwise the tenants would be left hanging in mid-air and would have

to be rescued by firemen. If the two ways of egress are not independent but are merged at any point except near the entrance of the building, the supplementary means of exit will lose its value, because in the event of the ordinary means of exit being enveloped in smoke or flames the supplementary exit would be similarly out of commission. For this reason it is especially important that the two ways of egress shall be remote from each other and that they shall be separated by walls or partitions so as to prevent the spread of smoke or flames from one to the other.

NOTE 3: The usual type that will be adopted will be a front and back stairs, as the back stairs serve a useful purpose as service stairs.

NOTE 4: It should be noted that the greatest freedom of choice consistent with the safety of the occupants of the dwelling has been given to the owner. One flight of stairs he would naturally provide of his own accord, irrespective of any provisions of law, in order to give the occupants of the building access to their rooms. (In the case of elevator apartment houses such stairs would not be necessary, but even here it would generally be provided so as to anticipate a situation where the elevators might be out of commission.) This takes care of one way of egress. The other way of egress may be any one of three which the owner may elect,—another flight of stairs either inside or outside, a system of outside fire-escapes or a fire tower. No reasonable person can object to this requirement.

NOTE 5: It is of great importance to have these supplementary exits, whether fire-escapes or a second flight of stairs, easily accessible to the occupants of the building. The requirement as to accessibility differs radically in the two classes of multiple dwellings. In the first class, namely, the residence buildings, apartment houses, tenement houses, and so forth, the second way of egress or fire-escape to be of any value must be directly accessible to each apartment. If tenants have to pass through a public hall (the other way of egress) to get to the fire-escape it is of little value, as experience has shown that the public hall invariably becomes filled with smoke and flames in such cases almost immediately after the outbreak

of fire, the hall acting as a gigantic chimney or flue. This is a point where there can be no compromise. Many architects who have not had special experience with regard to fires will not realize the importance of this point. Others who may be building apartment houses and who wish to remove fire-escapes from the front of the building in order to maintain the beauty of its architectural appearance will desire to be permitted to locate fire-escapes off the public hall, but under no circumstances can this safely be permitted. Such fire-escapes would be of little value in this class of buildings and loss of life would be sure to result if a serious fire broke out.

NOTE 6: The requirements are radically different in the case of multiple dwellings of Class B; namely, hotels and buildings of a similar character occupied for transient purposes. While it would be desirable to have here a second way of egress or fire-escape directly accessible from each room, this is not practicable in view of the fact that such buildings are usually divided up into a large number of single rooms with an occupant in each room. To require any such plan of fire protection would practically mean a fire-escape balcony at every window. Therefore, in the case of hotels and similar buildings access to the fire-escapes is required to be had from a public hall.

NOTE 7: It is to be observed that the requirement for the second way of egress applies to all classes of multiple dwellings, both fireproof and non-fireproof, as experience has shown that even in the case of a fireproof apartment house it is not safe to rely upon a single way of egress in case of fire. The rooms of such apartments are filled with inflammable material in the furnishings and serious fires can result.

NOTE 8: Some interests may contend that elevators should serve as one of the ways of egress. This contention is not sound and should not be permitted. Elevators can never be counted on in the case of a serious fire as a means of getting tenants out, as the elevator shaft is apt to become filled with smoke and flames at an early stage of the fire. The best fire authorities refuse to recognize elevators as ways of egress.

NOTE 9: In some cities it has become the custom to erect two-family houses, tenements and flats with

a front and rear stairs, the rear stairs being an outside stairs, generally of wood, with wooden balconies which are utilized, as a rule, as living porches and practically add an additional room to the apartments. This has become a firmly established type of construction in a number of cities and is much desired by the tenants. The objections to this form of construction have been very fully set forth in the discussion of section 39. Because of the desire to perpetuate this type of house, which has become a fixed fashion in many cities, there will be strenuous opposition to the provision of this section which requires the second way of egress to be of fireproof construction, and it will be very earnestly desired in certain classes of multiple dwellings to permit the use of outside wooden stairs and balconies. In some cities it may be necessary to make some concession. If so, the following concession is suggested. Add at the end of subdivision 2 of section 51 the following:

CONCESSION 1: "In the case of multiple-dwellings of Class A hereafter erected which do not exceed three stories in height and which are not occupied by more than four families in all, such additional flight of stairs may be an outside stairs of wood with wooden balconies, if located on the rear wall of the dwelling and kept entirely unenclosed.¹⁰" **Concession**

NOTE 10: It should be noted that this provision will permit the use of these outside wooden balconies and stairs in the case of tenements two stories high with two families on a floor and also in the case of tenements three stories high with not more than one family on a floor, but it will not permit them in buildings exceeding three stories in height or containing more than two families on a floor irrespective of height. **Explanation**

NOTE 11: A fire tower is a type of construction that is highly esteemed by fire authorities. It is generally a flight of stairs in a separate tower with a bridge or platform thrown across to it from the main building. It sometimes consists of an inclined plane or gradient of metal highly polished, permitting the occupants of the building to sit down upon it and slide to the bot-

tom, on the method of the "chute the chutes" common in many pleasure resorts. This is an excellent type of quick escape to get the people to the bottom in a short time without injury. When used, care should be taken to see that the knob of the entrance door giving access to it is located at a sufficient height so as to make it impossible for children to use it as a day-time plaything.

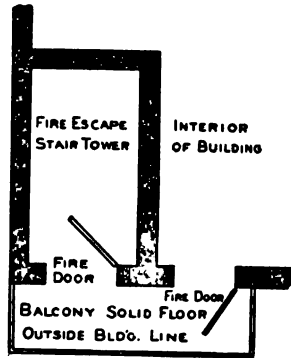


FIGURE 36
FIRE TOWER

§ 52. FIRE-ESCAPES. All fire-escapes hereafter erected on multiple-dwellings¹ shall be located and constructed as in this section required. Such fire-escapes shall be located at each story the floor of which is TWELVE or more feet above the ground.² Access³ to fire-escapes shall not be obstructed in any way. No fire-escape shall be placed in an inner court.⁴ Fire-escapes may project into the public highway⁵ to a distance not greater than four feet beyond the building line. All fire-escapes shall consist of outside open iron,⁶ stone or concrete balconies and stairways.⁷ All balconies shall be not less than THREE feet in width. All stairways shall be placed at an angle of not more than SIXTY degrees to the horizontal, with flat⁸ open steps not less than SIX inches in width and TWENTY-FOUR inches in length and with a rise of not more than EIGHT inches. The openings for stairways in all balconies shall be not less than TWENTY-FOUR by TWENTY-EIGHT inches,⁹ and

shall have no covers¹⁰ of any kind. The balcony on the top floor, except in the case of a balcony on the street or in the case of a peaked roof house, shall be provided with a stairs or with a goose-neck ladder leading from said balcony to and above the roof¹¹ and properly fastened thereto. A drop ladder¹² or stairs shall be provided from the lowest balcony of sufficient length to reach to a safe landing place beneath. All fire-escapes shall be constructed and erected to safely sustain in all their parts a safe load, and if of iron shall receive not less than two coats of good paint, one in the shop and one after erection. In addition to the foregoing requirements, all fire-escapes hereafter erected upon multiple-dwellings shall be constructed in accordance with such supplementary regulations¹³ as may be adopted by the superintendent of buildings.

NOTE 1: It should be observed that the requirements for fire-escapes apply only to multiple dwellings, for the reasons which have been set forth in the notes appended to Title 3.

Explana-
tion

NOTE 2: The fire-escapes cannot of course extend to the ground, as this would disfigure the front of the building, give ready access to thieves and would not be practicable. A balcony should be located, however, at the second story or the first above the ground. The point of 12 feet above the ground has been established here as being a reasonable distance and as providing for cases in multiple dwellings where there is a store on the first floor and a high ceiling is desired.

NOTE 3: Access to fire-escapes must be easy. If wash tubs, sinks and other fixtures are put in the way of the window and the access to the window thus narrowed, there may be loss of life.

NOTE 4: Fire-escapes in inner courts are as a rule of little value; that is, in an inner court of the minimum sizes prescribed by this act. There may be very large inner courts where this criticism would not apply, but such a condition is very rare. The objection to a fire-escape in an inner court is that the court being enclosed on four sides acts as a flue and in case of fire is apt to become filled with smoke. A fire-

escape in a court is also a detriment in that it encroaches upon the space left open for light and air.

NOTE 5: It is necessary to provide that fire-escapes may project into the highway beyond the building line in order to prevent adroit owners from refusing to erect fire-escapes on the ground that they are encroaching on the public highway. Without this special provision such a contention would be plausible and might be sustained by the courts. It is best to take no chances.

NOTE 6: Wooden fire-escape balconies are of little use as they would quickly be consumed if the fire were anywhere near the balconies. Iron is what will generally be used, although there are cases where owners will wish to use stone or concrete in order to make the treatment of the front of their building harmonize with its general architectural scheme. This of course should be permitted.

NOTE 7: Fire-escapes to be effective must consist of stairs, not ladders. Women, old people, invalids and children cannot use vertical ladders. Even if they could go down them they will not think they can and the fire-escapes will therefore lose their value as a means of giving such persons quick egress from the building in case of fire. It is the universal experience that where vertical ladders are used firemen invariably have to rescue the tenants and carry them down the ladders. The stairs will cease to be stairs if they are placed at too great an angle so as to be nearly perpendicular. There will be a constant tendency on the part of owners to do this as it will make possible shorter fire-escape balconies, thus reducing the cost and also putting less weight upon the walls of the building, but it must not be permitted. Sixty degrees is the maximum angle that should be permitted; 45 would be better.

NOTE 8: The steps must be flat, not round double rungs as are put on a ladder, as these will not seem to have the security of stairs and heels will catch in them. The minimum dimensions herein laid down are necessary in order to secure stairs that are not too steep or too narrow and that will give a firm foothold.

NOTE 9: Fire-escape openings must be large enough to permit persons of ordinary size to get through them readily. It is surprising what a small

hole people can get through if they have to. The minimum established here has been fixed upon as sufficient in most cases.

NOTE 10: Covers over the openings of fire-escape balconies should not be permitted. Some people will want to provide hinged covers because of accidents occasioned by people falling through the openings, children playing on them, and so forth. When fire comes the covers will be found to be rusted down or to be covered over and cannot be moved and people will be burned to death. The balconies should be kept free and for the purpose of escape in case of fire. Fire-escapes are not playgrounds.

NOTE 11: It often happens that owing to the location of the fire, escape is cut off below and tenants cannot go down the fire-escape balconies; they therefore must be given a chance to go up and escape from the roof to the roof of a neighboring building. That is why the goose-neck ladder to the roof is made necessary. In such cases tenants can be rescued from the roof by firemen, or more frequently can flee to adjoining roofs. Such a ladder is as necessary at the front of a building as at the rear. To require it, however, in some cases would mean disfigurement.

NOTE 12: Drop ladders are necessary from the lowest balconies; otherwise the tenants cannot get down. Such ladders should be light in weight, not too long, but always long enough to reach to the ground. In some cities a type of counter-balanced stairs is required; this works on weights and when not in use, is kept hanging in the air in a horizontal position at the level of the lowest balcony. By stepping on one of the steps the weight of the body brings the ladder into vertical position; this, however, is an awkward, heavy and cumbersome device and is objected to by property owners as an unnecessary disfigurement to their building, and rightly so. It gets out of order quite as frequently as a drop ladder, if not more so. Drop ladders will often be found rusted tight and therefore should be frequently inspected to see that they are in working order.

NOTE 13: All the essential requirements for fire-escape balconies, their location and construction, are contained in this section. Other details of their construction, such as the sizes of iron, methods of bolting,

and so forth, may be safely left to supplementary regulations to be adopted by the superintendent of buildings or other public officials performing similar functions.

§ 53. ROOF EGRESS; SCUTTLES AND BULKHEADS.¹ Every flat-roofed multiple-dwelling hereafter erected exceeding one-story in height shall have in the roof a bulkhead² or a scuttle not less than two feet by three feet in size. Such scuttle or bulkhead shall be fire-proof or covered with metal on the outside and shall be provided with stairs leading thereto and easily accessible³ to all occupants of the building. No scuttle or bulkhead shall be located in a closet or room, but shall be located in the ceiling of the public hall on the top floor, and access through the same shall be direct and uninterrupted.

**Explan-
ation**

NOTE 1: The purpose of this requirement is two-fold. First, to afford a means of egress to the roof of the building and thence to the roofs of adjoining buildings and to safety in the event of escape below being cut off. This is valuable only in the case of flat-roofed houses. Its second purpose is to afford a means by which smoke and flames can be quickly vented. The firemen by pushing up the scuttle and venting the smoke and flames can quickly save the building, whereas without this the building might be destroyed.

NOTE 2: The bulkhead is a sort of small penthouse or structure on top of the roof; in this case it is an enclosure for the stairs leading to the roof. It is necessary because without it the stairs cannot extend to the roof and afford means of exit that way. It should be noted that this provision does not require a bulkhead but gives the owner the option of furnishing either a bulkhead or a scuttle. A bulkhead with stairs leading to the roof of multiple dwellings occupied by many families is undoubtedly better than a scuttle with a ladder leading to it. The requirement that the scuttle or bulkhead shall be covered on the outside with metal is to secure the safety of the building in the event of fire in the neighborhood and prevent sparks which may blow to the roof from burn-

ing through the scuttle or bulkhead, as would be likely if of wood and unprotected.

NOTE 3: If egress to the roof is to be relied upon it must be easily accessible to the occupants of the building. If the ladder leading to the scuttle is locked up in a closet, the key is apt to be missing when fire breaks out and the tenants relying on this means of egress would then become trapped in the hallway on the top floor. A further provision will be found in section 115 prohibiting the locking of any scuttle or bulkhead with a key for similar reasons.

§ 54. STAIRS AND PUBLIC HALLS. Every multiple-dwelling hereafter erected shall have at least one flight of stairs extending from the entrance floor to the roof, and the stairs and public halls therein shall each be at least THREE feet wide in the clear. All stairs shall be constructed with a rise of not more than EIGHT inches and with treads not less than TEN inches wide and not less than THREE feet long in the clear. Winding stairs will not be permitted.

NOTE: The requirement that the stairs shall afford roof egress has already been shown to be a necessity. Three feet is the minimum width appropriate for stairs in buildings used by many occupants. In fact this is a little too narrow and many owners will build stairs wider than this. It is important to limit the rise of the stair to not more than 8 inches for two reasons: a steeper rise will be found dangerous in case of fire, as people running down in a hurry will fall and pile themselves up in a mass at the foot; stairs steeper than this are also injurious to climb, especially in the case of women. Winding stairs are prohibited because in case of fire people in their hurry to get out are likely to fall and pile themselves up in a huddled mass at the foot, thus causing injury and in many cases death.

Explan-
ation

§ 55. STAIR HALLS. In multiple-dwellings¹ hereafter erected which exceed TWO stories in height or which are occupied by more than TWO families on any floor,² the stair halls³ shall be constructed of fireproof material

throughout. The risers, strings and balusters shall be of metal, concrete or stone. The treads shall be of metal, slate, concrete or stone, or of hard wood⁴ not less than two inches thick. Wooden hand-rails to stairs will be permitted if constructed of hard wood. The floors of all such stair halls shall be constructed of iron, steel or concrete beams and fireproof filling, and no wooden flooring or sleepers shall be permitted.

**Explan-
ation**

NOTE 1: Again it should be noted that this provision for fireproof stairs applies only to multiple dwellings and even then only to certain types of multiple dwellings. Stair halls in private houses and two-family houses can be built of ordinary wooden construction.

NOTE 2: It should be observed that there is a double condition imposed in this section with regard to the class of buildings affected; namely, the building must be either over two stories in height or be occupied by more than two families on a floor to have the provision apply. If either of these conditions exist, then the section applies; that is, if the building is a three-story building with only one family on a floor the stair hall must be fireproof. Again, if the building is but two stories high and there are three families on a floor the stair hall must be fireproof.

NOTE 3: The stair halls in multiple dwellings are the danger points in case of fire. No matter where the fire starts, the invariable experience is that it spreads almost immediately to the stair hall, which acts as a gigantic flue. Furthermore, this is the normal place of escape for the occupants of the building. Their first instinct is to rush to the means of egress which they ordinarily use. It is essential, therefore, that such portions of the building shall be fireproof throughout so that when the fire gets there it may quickly burn itself out and have nothing to feed upon. In buildings constructed as provided in this section and with a ventilating skylight over the stairs, as is required in section 37, a fire would quickly burn itself out and be vented at the roof, thus insuring the safety of the occupants.

NOTE 4: Hard wood treads are permitted if not less than 2 inches thick because such a tread will be

slow in burning and could not possibly burn through before the tenants would have a chance to escape. Treads of this kind permit the stairs to have a finish which a slate or marble tread does not give; as the structure of the stairs is made of iron, stone or concrete, they will in most cases be supported by an iron, stone or concrete tread or frame beneath them.

§ 56. STAIR ENCLOSURES. In all multiple-dwellings¹ hereafter erected which exceed TWO stories in height or which are occupied by more than TWO families on any floor all stair halls shall be enclosed² on all sides with walls of brick³ or other approved fireproof material not less than eight inches thick. The doors opening from such stair halls shall be fireproof and self-closing.⁵ There shall be no transom or sash or similar opening⁴ from such stair hall to any other part of the house.

NOTE 1: This section applies only to certain classes of buildings, as explained in notes 1 and 2 under the discussion of section 55. Explana-
tion

NOTE 2: It has been pointed out in note 3 under the discussion of section 55 that the stair hall is the danger point in the multiple dwelling. This being so, the complete fireproof construction of stair halls is the keystone of the arch of safety of the building. In order to prevent fires spreading from stair halls to apartments or rooms,—“mushrooming out,” as it is called,—the stairs must be enclosed in brick walls. Where the stair halls are separated from the apartments by the ordinary lath and plaster partition, the fire quickly eats its way through it.

NOTE 3: It may be asked why these walls are limited to brick, and why partitions of terra cotta blocks or plaster blocks or other forms of fireproof material should not be permitted. There are two reasons for this apparent discrimination. The first is that as soon as one form of fireproof block is permitted, all the other forms of fireproof blocks are sure to be allowed. Some fireproof blocks are good and will stand both the heat and water tests, but many of the so-called fireproof blocks in use are little better than rubbish. Moreover, there is no way of being

sure that blocks of the quality that have been submitted to the test and have been approved by the building officials will be used on the job. Blocks of inferior quality are often substituted. The difficulties of enforcement are so great as to make the securing of the right kind of blocks extremely doubtful. It may be safe to take chances in this respect in other parts of the building, but the stair hall is so strategic a point in the fight against fire that no chances can safely be taken here.

The other reason is that most of the blocks used, while incombustible, will not stand up against the water pressure in a fierce fire when the hose is turned against them. A brick wall will. The same reasons apply to the requirement that the wall shall be not less than 8 inches in thickness; namely, two courses of brick. Anything less than 8 inches will not give satisfaction as it will not stand up against the hose pressure.

NOTE 4: The ideal condition would be to have the stair hall shut off completely from the apartments without any openings from the stair hall to the apartments. This, however, is of course impossible, as there must be door openings in the walls enclosing the stair hall to give the tenants access to their rooms; but these should be the only openings. Transoms or windows, either movable or stationary, should under no circumstances be permitted, not even when they are made of wire-glass. No liberties can be taken with this vital point of the building. Each opening means weakness. For these reasons it is deemed necessary that the doors leading from the hall to the apartments shall be both fireproof and self-closing, so that in the event of fire, if the fire starts in an apartment it cannot quickly eat through the panels of a wooden door and thus communicate to the stair hall and spread throughout the building endangering the lives of the occupants; nor, vice versa, can the fire eat through from the stair hall to the apartments of the tenants. For this reason a fireproof door is necessary. This does not mean an iron door; the ordinary "kalomein" door is entirely adequate; this is a wooden door the edges and sides of which have been carefully covered with metal. It is a standard fireproof door recognized by the under-

writers throughout the country. Many fire authorities consider it better than a metal door as it is slow-burning and will not warp in case of extreme heat as an iron door would. The manufacture of metal-covered doors has been so perfected that it is difficult for the ordinary observer to tell them from wood, stained and finished as they are to represent oak or mahogany; thus they are not an eye-sore when used in high-grade buildings.

NOTE 5: The requirement that the doors shall be self-closing is for the purpose of safeguarding the situation where a tenant is aroused by a cry of fire or smells smoke, opens the door of his apartment leading to the stair hall, is met by a gust of smoke or flame and rushes back into his apartment and thence to the fire-escape, leaving the door from the apartment to the hall open, thus permitting the flames to enter the apartment and destroy it. The self-closing door insures the closing of the door even if the occupant becomes panic stricken. This is a very important requirement. It involves no material cost, as the purposes of the act are met if the door is provided with a strong spiral spring or is so hinged as to close itself, as can easily be done by giving the hinge a slight inclination.

§ 57. ENTRANCE HALLS. Every entrance hall in a multiple-dwelling hereafter erected shall be at least FOUR FEET SIX INCHES wide¹ in the clear, and shall comply with all the conditions of the preceding sections as to the construction of stair halls.² In every multiple-dwelling hereafter erected, access³ shall be had from the street or alley to the yard, either in a direct line or through a court.

NOTE 1: As the tenants from all the upper stories in case of fire have to use the same entrance hall to get access to the street, it is obvious that it is necessary to have the entrance hall wider than the individual halls on each story. The minimum prescribed here is the minimum. Most builders will leave a wider entrance hall. Five feet is none too wide.

Explan-
ation

NOTE 2: The entrance hall, as it is an essential part of the way out of the building in case of fire, will

of course have to be constructed fireproof in the same way that the stair halls are at each story.

NOTE 3: Access from street to yard is important both as a means of egress for the tenants who may go down the rear fire-escapes or rear stairs, and also as a means of access to the rear of the building for the firemen who may wish to fight the fire from the rear of the building and who might be prevented from so doing if there were not such rear access. The best access is on the ground floor in a direct line from the street by extending the entrance hall to the yard. Sometimes this is not feasible. In such cases the next best access is by a tunnel or passageway through the cellar in a straight line from the street to the yard.

§ 58. DUMB-WAITERS AND ELEVATORS. In multiple-dwellings hereafter erected all dumb-waiters and elevators shall be enclosed in fireproof shafts¹ with fireproof doors at all openings at each story, including the cellar. In the case of dumb-waiters such doors shall be self-closing.² No elevator shall be permitted in the well-hole of stairs³ but every elevator shall be completely separated from the stairs by fireproof walls enclosing the same.

**Explan-
ation**

NOTE 1: Any vertical shaft, such as an elevator or dumb-waiter shaft, extending throughout the building, is a potent means of spreading fire, as it acts as a flue, and fire leaps from floor to floor almost immediately. It is therefore essential for the protection of the building that such shafts be completely enclosed within fireproof walls, with fireproof doors at all openings, especially in the cellar, as the cellar is the greatest danger point, owing to the accumulation of waste materials usually found there.

NOTE 2: In the case of dumb-waiters the doors should be self-closing for the reasons pointed out in note 5 in the discussion of section 56. This is not feasible in the case of elevators, as elevators are equipped with sliding doors which cannot be self-closing. Nor is there such necessity, as elevators are always operated by some individual who can be relied upon to keep the doors closed for purposes of safety.

NOTE 3: Until very recently the practice has been general not only in multiple dwellings but in public

buildings such as office buildings, and so forth, of locating the elevators alongside the public stairs and even in the same well-hole. Recent experience with one or two disastrous fires, however, has shown that the elevator with its greased tracks is a potent source of danger in case of fire and that stairs located alongside the elevators are likely to be useless if fire breaks out in the region of the elevators. For this reason the recent practice not only in housing laws but in building codes is to require the elevators to be completely separated from the stairs by fireproof walls.

§ 59. CELLAR STAIRS. In multiple-dwellings of Class A hereafter erected which exceed TWO stories in height or which are occupied by more than TWO families on any floor there shall be no inside stairs communicating between the cellar or other lowest story and the floor next above, but such stairs shall in every case be located outside the building.

NOTE: One-fourth of all fires in multiple dwellings start in cellars. These frequently contain much rubbish and waste material, and tenants and sometimes outsiders throw matches on the cellar floors. For these reasons the cellar is a danger point. In order to safeguard the lives of the tenants the cellar should be completely shut off from the upper parts of the building. In the larger buildings this should be done by a tier of fireproof beams and fireproof flooring, and in all multiple dwellings there should be no inside communication between the cellar and the upper stories. If there is such communication in the form of an inside stairs, a fire which starts in the cellar will quickly spread throughout the building and endanger the lives of the occupants. While it is slightly inconvenient for tenants to have to go outside of the building into the yard or court to get down into the cellar, that inconvenience is not comparable to the danger arising from the other form of construction. This inconvenience can be minimized by locating the outside stairs immediately adjoining the rear wall of the building or the court wall and thus not causing any material inconvenience. In elevator apartment houses both the elevator shafts

Explana-
tion

and dumb-waiter shafts will extend down into the cellar, but as these will, under the provisions of section 58, be entirely enclosed with brick walls and be provided with fireproof doors, the danger of fire spreading through this means is practically reduced to a minimum.

§ 60. CLOSET UNDER FIRST STORY STAIRS. In multiple-dwellings hereafter erected no closet of any kind shall be constructed under any staircase leading from the entrance story to the upper stories, but such space shall be left entirely open and kept clear and free from incumbrance.

Explanation

NOTE: Closets should not be permitted under stairs leading to the upper stories. If they are, waste materials will accumulate. Sometimes oily rags will be thrown into them by servants, engineers or tenants. Spontaneous combustion may take place and the whole stairs suddenly be on fire.

§ 61. CELLAR ENTRANCE. In every multiple-dwelling hereafter erected there shall be an entrance to the cellar or other lowest story from the outside of the said building.

Explanation

NOTE: The purpose of this section is to enable the firemen to quickly get at a cellar fire and control it.

§ 62. WOODEN MULTIPLE-DWELLINGS. No wooden multiple-dwelling shall hereafter be erected, and no wooden building not now used as a multiple-dwelling shall hereafter be altered into a multiple-dwelling or converted to such use.

Explanation

NOTE: In some of the larger cities wooden tenement houses are permitted. They should not be tolerated. They are not only a danger in case of fire but when old become a source of sanitary evil, filled with vermin and disease germs. No new wooden multiple dwellings are necessary. Where land values are so low that brick or concrete cannot be profitably constructed multiple dwellings are not necessary but the population can be profitably housed in one-family or two-family dwellings.

ARTICLE III

ALTERATIONS

In this article will be found the provisions which must be observed when a person proposes to alter an existing dwelling.

NOTE: At first sight it will seem to many that most of the provisions in this article are a repetition of provisions to be found in Article II. While it is true that many of them could be combined with similar sections in the article relating to new buildings, they have purposely been placed in a separate article for the sake of greater clarity and greater facility of use. One of the chief advantages of this law lies in this very fact, that it is so divided into separate parts, thus making it possible for different interests to concern themselves only with those provisions of the law which directly affect them. For example, the owner of an existing dwelling will only have to concern himself with the maintenance provisions (Article IV) and improvements (Article V), and of course the general provisions which contain the definitions (Article I). He will not have to wade through the detail of the provisions which affect new buildings. Similarly, the builder who wants to erect a new dwelling will only have to concern himself with Articles I and II, and the owner of an existing building in the event of his contemplating alterations will have to concern himself only with the provisions of this article, namely, Article III.

Explana-
tion

§ 70. PERCENTAGE OF LOT OCCUPIED. No dwelling shall hereafter be enlarged or its lot be diminished, or other building placed on its lot, so that a greater percentage of the lot shall be occupied by buildings or structures than provided in section twenty of this act.

Explanation

NOTE: It is obvious that it is not fair to permit an old dwelling to be altered so as to cover more of the lot than would be permitted in the case of a new one. The conditions are naturally better in the newer building. Failure to safeguard this point would lead to the almost complete evasion of the law with respect to new buildings as was shown by the experience of an eastern city some years ago, referred to in note 1 under the discussion of section 3. This provision not only forbids the extension of an existing dwelling beyond the limits specified, but also prohibits the erection of other buildings or structures on the same lot so as to cover more land than is permitted.

§ 71. HEIGHT. No dwelling shall be increased in height so that the said dwelling shall exceed the WIDTH of the widest street on which it abuts, nor in any case ONE HUNDRED feet.

Explanation

NOTE: This does not prohibit the increase in height of an existing dwelling but does prohibit such increase beyond the limits allowed for new dwellings. If it is decided to make the concession discussed in section 21 in connection with the height of new dwellings so as to exempt hotels, a similar concession should be made here. Add at the end of the section the following:

Concession

CONCESSION 1: "This provision shall not apply to hotels."

§ 72. YARDS. No dwelling shall hereafter be enlarged or its lot be diminished, or other building placed on the lot, so that the rear yard or side yard shall be less in size than the minimum sizes prescribed in sections twenty-two and twenty-three of this act for dwellings hereafter erected.

Explanation

NOTE: It should be observed that this does not prohibit the alteration or extension of existing dwellings or the encroachment on an existing yard, but only prohibits reduction of the minimum size of a rear yard or side yard below the standard established for new dwellings.

§ 73. NEW COURTS IN EXISTING DWELLINGS.¹ Any court hereafter constructed in a dwelling erected prior to the passage of this act used to light or ventilate rooms² or water-closet compartments shall be not less than EIGHT feet in its least dimension in any part, and such court shall under no circumstances be roofed or covered over with a roof or skylight; every such court, if an inner court, shall be provided at the bottom with one or more horizontal air-intakes which shall consist of passageways each not less than THREE feet wide and SEVEN feet high, which shall communicate directly with the street or rear yard, and shall always be left open, or be provided with an open gate at each end.

NOTE 1: This section prescribes the limits in width and area of a new court which may be hereafter constructed in an existing dwelling to provide light and ventilation for rooms or water-closets. It will be noted that this requirement does not correspond to the requirement for courts in new dwellings but is less strict. While from an ideal point of view it would be desirable to impose the same standards as in the case of a new dwelling, the effect of this would be practically to prevent the improvement of the older houses, an improvement that should be encouraged, not discouraged. It has therefore been thought wise to permit a court 8 feet in width and length in a dwelling of this type. In order to keep the provision simple and to encourage this type of improvement, the plan for an increase in the size of the court proportionate to the height of the building as required for new buildings, is not followed here. The horizontal air-intakes, or tunnels, at the bottom of the court are an essential feature in a court of this small size to insure circulation of the air.

Explana-
tion

NOTE 2: This section assumes especial significance in connection with the requirement contained in section 120, where a scheme is laid down for the bringing of light and air into the inner dark, windowless rooms which exist in so many cities. There are two methods by which such rooms can be improved. The simpler and cheaper method is the one outlined in section 120; namely, the cutting in of a window in the partition

between the inner and outer room. There will be cases, however, where the owner desires to make greater improvements than this and to construct a small court in the building for the purpose of lighting the inner rooms and also the new water-closets which he intends installing in the building in cases where

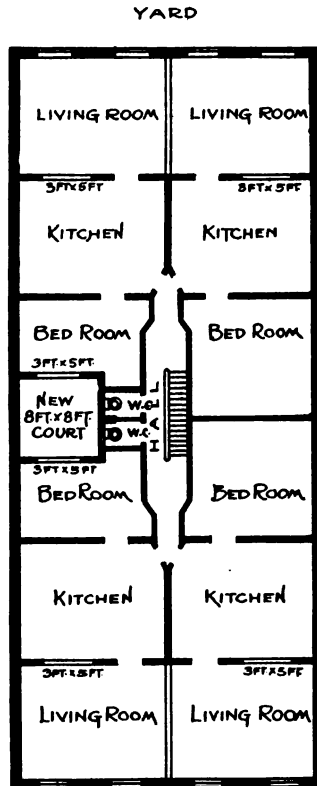


FIGURE 37
NEW COURT IN AN OLD BUILDING

there have been vaults or similar receptacles out of doors and where, under the provisions of section 124, these have to be removed. In such instances it is to the owner's interest, as well as greatly to the interest of the tenants, to have a small court constructed in the building.

§ 74. **ADDITIONAL ROOMS AND HALLS.** Any additional room or hall that is hereafter constructed or created in a dwelling shall comply in all respects with the provisions of article two of this act, except that it may be of the same height as the other rooms on the same story of the dwelling.

NOTE: This is a necessary provision, as otherwise apartments and rooms in existing dwellings could be subdivided and dark rooms and rooms too small in size could be created. **Explanation**

§ 75. **ROOMS AND HALLS, LIGHTING AND VENTILATION OF.** No dwelling shall be so altered or its lot diminished that any room or public hall or stairs shall have its light or ventilation diminished in any way not approved by the health officer.

NOTE: It has been found necessary to enact this "drag-net" provision, as it is not always possible to state in detail all of the circumstances which may **Explanation**

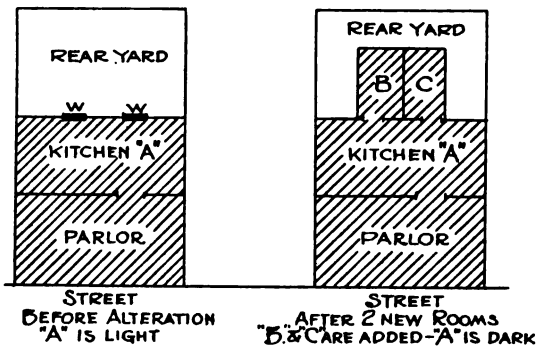


FIGURE 38

arise in connection with the alteration of the interior of existing dwellings. Without such a provision it has been found that alterations which prove injurious to the welfare of the occupants are often brought about. For example, an extension could be added to an existing dwelling in such a way as greatly to diminish the light and ventilation of existing rooms, although the

new rooms thus created might have adequate light and ventilation. Figure 38 on page 165 illustrates this. A represents an existing room which, before the extension was added, was flooded with light and air. Since the addition of the extension and the creation of two new rooms, B and C, A has become almost uninhabitable, though rooms B and C are strictly legal and are desirable rooms.

In a similar way without a provision of this kind it would be possible where an existing public hallway extends to the rear of the dwelling, running through from the street to the yard and thus affording ample light and ventilation, to shut this off and make a room at either end of the hall, thus making the hallway

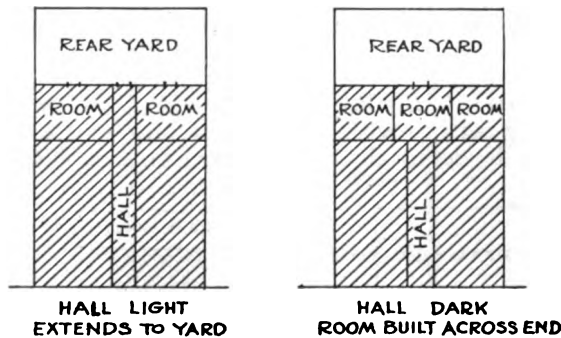


FIGURE 39

dark and without ventilation. Figure 39 illustrates this. The left-hand diagram shows the hallway as it was originally. The right-hand diagram shows the same public hallway after this undesirable alteration.

§ 76. **ALCOVES AND ALCOVE ROOMS.** No part of any room in a dwelling shall hereafter be enclosed or subdivided, wholly or in part, by a curtain, portière, fixed or movable partition or other contrivance or device, unless such part of the room so enclosed or subdivided shall contain a window as required by sections twenty-nine, thirty and thirty-five of this act, and have a floor area of not less than ninety square feet.

NOTE: The necessity for not permitting dark alcove rooms has been fully discussed in the notes under section 33. It is apparent that if we do not wish to have new dark rooms created in the future there must be a provision of this kind to prevent the alteration of rooms in this way.

Explana-
tion

§ 77. SKYLIGHTS. All new skylights hereafter placed in a multiple-dwelling shall be provided with ridge ventilators having a minimum opening of FORTY square inches and also with either fixed or movable louvres or with movable sashes, and shall be of such size as may be determined to be practicable by the health officer.

NOTE: It should be noted that this provision requires no change in existing skylights. It applies only to those which may hereafter be placed in an existing house; it also applies only to multiple dwellings. This is an attempt to improve the existing conditions of light and ventilation, especially ventilation, in the dark hallways of existing multiple dwellings. The conditions vary so greatly in different buildings that experience shows it to be unwise to attempt to outline in the law in precise terms the exact conditions which must be observed.

Explana-
tion

§ 78. WATER-CLOSET ACCOMMODATIONS. Every¹ water-closet hereafter placed in a dwelling, except one provided to replace a defective or antiquated fixture² in the same location, shall comply with the provisions of sections thirty-five, forty-five and forty-seven of this act relative to water-closets in dwellings hereafter erected. Except that in the case of a new water-closet installed on the top floor of an existing dwelling,³ a ventilating skylight open to the sky may be used in lieu of the windows required by section thirty-five.

NOTE 1: It is obvious that it will not do to permit new water-closets to be placed in old buildings located in the dark, or with antiquated fixtures, or without waterproof floors, or in other ways to perpetuate the evils of the older types of fixtures.

Explana-
tion

NOTE 2: An exception is properly made in the case where a new fixture is put in to replace a defective or antiquated fixture, provided it is in the same location. For instance, there will frequently arise cases where there are broken fixtures located in compartments which are not lighted and ventilated directly to the outer air. The health of the occupants of the house requires the broken fixture to be taken out and a new fixture substituted. Unless this provision were made it would be unlawful to replace the old fixture because the closet is not lighted and ventilated to the outer air. From an ideal point of view it would be desirable to require all existing water-closets which are not now lighted and ventilated to the outer air to be abandoned and a new location found for them, but this is not a practicable plan, as it involves too great an expenditure of money and sacrifice of space on the part of the owner for the results obtained.

NOTE 3: It is often desired to construct a new bathroom or place an additional water-closet on the top floor of an existing dwelling in a location where there will not be a window to the outer air but a skylight can be used instead. Ample light and air can thus be obtained and there is no harm in permitting this to be done. This assumes especial importance in connection with the removal of privy vaults required under section 124. This important work will be greatly facilitated if owners realize that they can place the water-closets that are to be substituted for the privy vaults on the top floor of the building and light and ventilate them by ventilating skylights in the roof. No attempt has been made to lay down in the law the minimum size of the skylight or the amount of ventilation to be secured, as there would be no object on the part of the owner in reducing this below a proper standard.

§ 79. FIREPROOF DWELLINGS. No dwelling shall hereafter be altered so as to exceed THREE stories in height unless it shall be a fireproof dwelling.

Explan-
ation

NOTE: This section prohibits the extension in height of an existing dwelling above the limits prescribed for new dwellings laid down in section 50. If the limit of height there established is changed from

three stories to something else, the standard in this section should be similarly changed to correspond.

§ 80. FIRE-ESCAPES. All fire-escapes hereafter constructed on any multiple-dwelling shall be located and constructed as prescribed in section fifty-two of this act.

NOTE: This section in no way affects existing fire-escapes. It applies only to those which may be hereafter erected upon a multiple dwelling. It is obvious that all new fire-escapes that are constructed in the future, whether upon a new dwelling or an old one, if the fire-escapes are themselves new, should conform to the provisions of the law with regard to fire-escapes on new dwellings.

Explan-
ation

§ 81. ROOF STAIRS. No stairs leading to the roof in any multiple-dwelling shall be removed or be replaced with a ladder.

§ 82. BULKHEADS. Every bulkhead hereafter constructed in a multiple-dwelling shall be constructed fire-proof or covered with metal on the outside.

NOTE: The reasons for requiring bulkheads to be covered with metal on the outside have been fully set forth in the discussion under section 53.

Explan-
ation

§ 83. STAIRWAYS. No public hall or stairs in a multiple-dwelling shall be reduced in width so as to be less than the minimum width prescribed in sections fifty-four and fifty-seven of this act.

§ 84. DUMB-WAITERS AND ELEVATORS. All dumb-waiters and elevators hereafter constructed in multiple-dwellings shall be enclosed in fireproof shafts with fireproof doors at all openings at each story, including the cellar, in the case of dumb-waiters such doors shall be self-closing; and such shafts shall be completely separated from the stairs by walls of approved fireproof material enclosing the same.

NOTE: This section does not apply to dumb-waiter shafts or elevator shafts which are already in existence,

Explan-
ation

but only to new ones which may be installed after the act takes effect both in new dwellings and in existing ones. The reasons for this requirement have been fully set forth in the discussion under section 58.

§ 85. ALTERATION OF EXISTING WOODEN MULTIPLE-DWELLINGS. No existing wooden multiple-dwelling shall hereafter be enlarged, extended or raised, except that a wooden extension not exceeding a total area of seventy square feet may be added, provided such extension is used solely for bath-rooms or water-closets. Nor shall any existing wooden multiple-dwelling be so altered or have its occupancy so changed as to be occupied by more than one family on any floor.

**Explan-
ation**

NOTE: As new multiple dwellings constructed of wood are entirely forbidden, it is obvious that the increase in height of existing wooden multiple dwellings should not be permitted. It will not do, however, to prohibit absolutely any alteration to such buildings. Additions will of necessity have to be made in some cases, especially where privy vaults are removed and water-closets are installed. It would be absurd to require the new extension to a wooden multiple dwelling in which water-closets are to be located to be of brick. On the other hand, there are limits which should be strictly observed. It will not do to permit the indefinite extension of wooden multiple dwellings or any material increase in the number of families living in such dangerous buildings. It is therefore wise to prohibit their alteration so that they will not be occupied by more than one family on a floor. This does not mean that the existing wooden multiple dwelling which now houses two or even more families on a floor cannot be altered at all. The language is precise. It means that the house shall not be so altered as to provide accommodations for more than one family on a floor if these accommodations are not there at the time the law takes effect. The objections to wooden multiple dwellings have been fully set forth in the discussion under section 62.

§ 86. WOODEN BUILDINGS ON SAME LOT WITH A MULTIPLE-DWELLING. No wooden building of any kind whatsoever shall hereafter be placed or built upon the same lot with a multiple-dwelling within the fire limits, and no existing wooden structure or other building on the same lot with a multiple-dwelling within the fire limits shall hereafter be enlarged, extended or raised.

NOTE: This section is intended to prohibit the erection of wooden sheds and out-buildings and similar unsightly and dangerous structures on the same lot with multiple dwellings in the built-up portions of cities. Such structures are a menace in case of fire and are also objectionable for sanitary reasons. They are subject to rapid decay and become harboring places for dirt, disease germs and vermin.

Explana-
tion

ARTICLE IV

MAINTENANCE

In this article will be found the provisions which an owner must observe with regard to the maintenance of a dwelling.

§ 90. PUBLIC HALLS, LIGHTING OF IN THE DAYTIME. In every multiple-dwelling where the public halls and stairs are not in the opinion of the health officer sufficiently lighted, the owner of such house shall keep a proper light burning in the hallway near the stairs upon such floors as may be necessary from sunrise to sunset.

Explana- tion

NOTE: This provision is for artificial light in the daytime. In some houses where the halls and stairs do not have windows to the outer air or are lighted and ventilated by courts too small in size the halls are often dark in the daytime. Owing to the varying conditions which exist in the different types of old houses, it is not wise to attempt to prescribe definitely in the law the exact conditions under which it shall be necessary to keep artificial light burning. This is a case where the matter must be left to the intelligence and common sense of the health officer. It is greatly to the interest of owners to comply with this section; otherwise, in the event of injuries resulting to a tenant through falling on the stairs, the landlord would be liable for damages.

§ 91. PUBLIC HALLS, LIGHTING AT NIGHT. In every multiple-dwelling a proper light shall be kept burning by the owner in the public hallways near the stairs upon each floor every night from sunset to sunrise throughout the year if so required by the health officer.

NOTE: This is a provision for lighting the public halls and stairs at night. It applies only to multiple dwellings and is important from the point of view of protection against fire and also from the point of view of morality. Where halls are dark, especially in tenement houses, tenants and visitors are apt to strike matches to find their way, often throwing the match on the floor before it is fully extinguished. Many fires start in this way. Dark halls have also been found to encourage immoral practices. It has not been attempted to state precisely in the act the conditions under which the light shall be kept burning. As in the preceding section, it is left to the intelligence and common sense of the health officer. In some multiple dwellings of the higher class it is unnecessary to maintain a light all night. In others it is essential.

Explana-
tion

§ 92. WATER-CLOSETS IN CELLARS: No water-closet shall be maintained in the cellar¹ of any dwelling without a permit in writing from the health officer, who shall have power to make rules and regulations governing the maintenance of such closets. Under no circumstances shall the general water-closet accommodations of any multiple-dwelling be permitted in the cellar or basement thereof; this provision, however, shall not be construed so as to prohibit a general toilet room² containing several water-closets, provided such water-closets are supplementary to those required by law.

NOTE 1: No city should permit the maintenance in the cellar of the general water-closet accommodations of a multiple dwelling. From a sanitary point of view nothing could be worse. The objections to the cellar water-closet have been fully set forth in the discussion under section 45. It is sometimes necessary, however, to permit individual water-closets in cellars. There may be stores on the ground floor and no space for the water-closet there. There may be janitors' apartments in the cellars and there must be single water-closets there, but the health officer should have the power to see that all water-closets are maintained under proper conditions.

Explana-
tion

NOTE 2: The necessity for excepting a general toilet room in a high-class hotel where the closets in the toilet room are supplementary to those required by law has already been discussed under section 45.

§ 93. WATER-CLOSET ACCOMMODATIONS. In every dwelling existing prior¹ to the passage of this act there shall be provided at least one water-closet for every TWO apartments, groups or suites of rooms, or fraction thereof.² Except that in multiple-dwellings of Class B³ there shall be provided at least one water-closet for every FIFTEEN occupants or fraction thereof.

Explanation

NOTE 1: It should be observed that this section deals with the sufficiency of water-closet accommodations in dwellings existing prior to the passage of the act. So far as new dwellings are concerned this subject is taken care of in section 45. The ideal requirement would be to have in all multiple dwellings, both old and new, especially those of a residential character, one water-closet for every family. This is requisite not only for decency but for health. The public water-closet is a potent source of spreading venereal disease and where responsibility for its use is divided, experience shows that it is nearly always kept in a neglected and unsanitary condition. It would be deemed extreme in some cases, however, to impose this requirement on owners of existing houses. One water-closet for every two families, however, is only what decency requires. Nothing less than this should be tolerated. The family or the apartment in the case of buildings of this type is the best basis of measurement. One water-closet to so many occupants is difficult of enforcement, as the number of occupants in such houses is a variable element. The number of apartments in the building, which is practically the number of families, is on the other hand a constant factor. If it is found practicable to raise the standards and require one water-closet for every family, the following variation is suggested:

Variation

VARIATION 1: Strike out the words "two apartments, groups or suites" and insert "apartment, group or suite"

NOTE 2: It should be observed that where there are not a sufficient number of water-closets already in existence for the number of apartments in the building and it is necessary to provide new water-closets, the new water-closets will have to conform to the requirements of sections 35, 45, and 47 as provided in section 78.

Explan-
ation

NOTE 3: In the case of multiple dwellings where the occupancy is of a transient nature, such as hotels, boarding houses, lodging houses, and so forth, namely, those of Class B, it is not practicable to require one water-closet for each group of rooms, as the rooms are apt to be let singly. The only standard that can be fixed here is on the basis of the number of occupants. This is not a satisfactory standard but will on the whole give reasonably satisfactory results. One closet for every 15 persons is the minimum. A similar requirement will be found in most of the labor laws of the country in the regulations for factories where many people are employed.

§ 94. BASEMENT AND CELLAR ROOMS. No room in the cellar¹ of any dwelling² erected prior to the passage of this act shall be occupied for living purposes. And no room in the basement of any such dwelling shall be so occupied without a written permit³ from the health officer, which permit shall be kept readily accessible in the main living room of the apartment containing such room. No such room shall hereafter be occupied unless all the following conditions are complied with:

- (1) Such room shall be at least SEVEN feet high in every part from the floor to the ceiling.
- (2) The ceiling of such room shall be in every part at least THREE FEET SIX INCHES above the surface of the street or ground outside of or adjoining the same.
- (3) There shall be appurtenant to such room the use of a water-closet.
- (4) At least one of the rooms of the apartment of which such room is an integral part shall have a window opening directly to the street or yard, of at least TWELVE square

feet in size clear of the sash frame, and which shall open readily for purposes of ventilation.

(5) The lowest floor shall be water-proof and damp-proof.

(6) Such room shall have sufficient light and ventilation, shall be well drained and dry, and shall be fit for human habitation.⁴

Explanation

NOTE 1: There is no city in America except New York which needs to countenance the occupancy of cellar rooms for living purposes. Most cellar rooms are unfit to be used as living places by human beings; nor is there in many cities such lack of living accommodations, or pressure of population or inability to spread out as to make necessary going underground for homes. Notwithstanding these facts it is surprising to find the extent to which cellar rooms are occupied for living purposes in many of our cities. It is because no effort has been made to prevent this evil. Such rooms are generally low priced and there are always plenty of people who will live under any conditions, no matter how bad, if they are permitted to. This evil should be dealt with with a stern hand. If, however, it is felt necessary to make concessions in this respect and to permit the occupancy of rooms in cellars, the following concession might be considered. (There are a few cellars under exceptional conditions which can be safely occupied.)

Concession

CONCESSION 1: After the fifth word "cellar" insert the following: "or basement" and strike out the period after "purposes" and also the following words: "And no room in the basement of any dwelling shall be so occupied"

Explanation

NOTE 2: It should be noted that this section relates solely to rooms in cellars and basements already in existence at the time the act takes effect. The conditions which govern the occupancy of cellar and basement rooms in new dwellings will be found in sections 40 and 41 and in those other provisions of Article 11 which deal with the size and ventilation of rooms, and so forth.

NOTE 3: In order to prevent the continuance of

improper conditions it is essential that the health officer should have complete control over the occupancy of basement and cellar rooms at all times. This can best be secured by requiring a written permit from the health officer stating that such rooms can be occupied. It is also desirable to require that a copy of the permit shall be kept in one of the rooms of the apartment so that it can be seen by anyone inspecting the rooms as occasion may require.

NOTE 4: The essential conditions which make a basement room fit for occupancy are that the rooms shall be sufficiently high, shall be reasonably above ground, shall have proper light and ventilation and be free from dampness. Certain definite standards are therefore established in this section. It is recognized, however, that these standards may be observed and yet, owing to some reason unforeseen, the rooms may not be fit for human occupancy. The health officer should under such circumstances be free to refuse a permit, to forbid their occupancy. The "drag-net" clause requiring that the rooms shall have sufficient light and ventilation, shall be well drained and dry, and shall be fit for human habitation is therefore added. Under the terms of this latter provision if any basement rooms are occupied which are not fit for occupancy, the fault will rest with the health officer who can be quickly called to account.

§ 95. CELLAR WALLS AND CEILINGS. The cellar walls and cellar ceilings of every dwelling shall be thoroughly whitewashed or painted a light color and shall be so maintained. Such whitewash or paint shall be renewed whenever necessary, as may be required by the health officer.

NOTE: This is a sanitary measure. A coat of whitewash on cellar walls and ceilings will do wonders as a germ destroyer. It will also lighten up dark cellars and thus prevent dirt and rubbish from accumulating. The cost of a coat of whitewash is negligible.

Explanation

§ 96. WATER-CLOSETS AND SINKS. In all dwellings the floor or other surface beneath and around water-closets

and sinks shall be maintained in good order and repair and if of wood shall be kept well painted with light colored paint.

Explanation

NOTE: The purpose of this requirement, especially the painting of the woodwork underneath water-closets and sinks, is to insure the keeping of these places in a sanitary condition. As they are frequently in the dark, where accumulations of dirt and filth do not show, the painting of the floor surface underneath them with white paint will at once show up such accumulations, thus leading to their removal. Objection may be raised to this provision in its application to high-class private dwellings, where the owners of such houses have a good hardwood floor in their bathrooms and object to having a square of white paint under the water-closet fixture. Where such objection is raised and is raised seriously the following concession is suggested:

Concession

CONCESSION 1: Before the third word "dwellings," insert the words "two-family," and after the same word insert the words "and multiple-dwellings"

§ 97. REPAIRS. Every dwelling and all the parts thereof shall be kept in good repair, and the roof shall be kept so as not to leak, and all rain water shall be so drained and conveyed therefrom as not to cause dampness in the walls or ceilings.

Explanation

NOTE: In some cities the requirement is made that not only rain water shall not cause dampness in the walls or ceilings but that it shall be conveyed from the premises so as to prevent the water from dripping on the ground. This means that a system of rain leaders and gutters must be provided on the outside of the building and these in turn either connected with the sewer or the plumbing system of the building, where there is one, or conducted to the street by means of a gutter under the surface of the yard or court. This is a perfectly proper provision but in the smaller communities where the customary method is to permit the water to drip on the ground, objection is made to it out of all proportion to the benefits to

be obtained. Where it is possible to require that the water shall not drip on the ground it is highly desirable and the following variation is therefore suggested. After the words "and conveyed therefrom as" strike out the rest of the section and insert the following:

VARIATION 1: "to prevent its dripping on to the ground or causing dampness in the walls, ceilings, yards or areas." **Variation**

§ 98. **WATER SUPPLY.**¹ Every dwelling shall have within the dwelling at least one proper sink with running water furnished in sufficient quantity at one or more places exclusive of the cellar.² In two-family-dwellings and multiple-dwellings of Class A there shall be at least one such sink on every floor, accessible to each family on the floor occupied by said family without passing through any other apartment.³ The owner shall provide proper and suitable tanks, pumps or other appliances⁴ to receive and to distribute an adequate and sufficient supply of such water at each floor in the said dwelling at all times of the year, during all hours of the day and night. But a failure in the general supply of city water shall not be construed to be a failure on the part of such owner, provided proper and suitable appliances to receive and distribute such water have been provided in said dwelling.

NOTE 1: A plentiful supply of pure water is probably the greatest essential of modern civilization, far more important than protection against fire or the elements. Without an adequate supply of water we cannot expect to have good citizens. Cleanliness is in this instance above godliness or rather part of it. Most of the unsanitary and disgraceful conditions which are found in the slums of our cities are due to the lack of a proper water supply within the dwelling convenient of access to all the tenants. Where all the water that must be used can be had only from a hydrant in the yard or from some neighboring yard and has to be carried up three or four flights of stairs, cleanliness is at a premium; not only cleanliness of the person but cleanliness of the

Explanation

dwelling. The unregenerate slum landlord will strenuously object to furnishing water inside the house but we are on safe ground in insisting on no abatement in this provision. It was a similar provision enacted in New York City in 1887 that was tested and went to the Court of Appeals, which resulted in the decision known as the case of *Health Department vs. Rector*, 145 N. Y., where the requirement to furnish water inside the building in all existing tenement houses was not only sustained but a decision was rendered by that court which greatly strengthened the authority of the police power generally throughout the country.

NOTE 2: Sanitary conditions will not result if the only source of water supply is a sink in the cellar. Such sinks are bound to be located in the dark and be subject to abuse. They are also too convenient of access to passersby and neighbors and for this reason are likely to be abused. It is also imposing on the tenants on the top floor too great a burden to have to carry water from the cellar to the top story.

NOTE 3: It should be noted that this provision does not go to the extent of requiring a separate sink in each apartment, though this is highly desirable. In new dwellings (section 44) this is required, but it might be considered a hardship to impose a similar requirement in the case of the older buildings. What is required, however, is that there shall be at least one sink with a proper supply of running water inside of each dwelling, and that in the case of tenement houses, flats and apartments, and similar buildings there shall be such a sink inside of each apartment or in the public hall accessible to all the families on that floor.

NOTE 4: The requirement that the owner shall provide proper and suitable tanks and other appliances means that he shall provide faucets at the sinks, and that when the city water pressure is not adequate to supply water to the top floors he must install a system of tanks, or pumps, or some other mechanism that will insure an adequate supply for such floors at all times. This is essential not only for reasons of cleanliness and morality but especially important in case of fire.

NOTE 5: This section is of course subject to the

limitations of there being a communal water supply in the town and must be read in connection with section 7.

§ 99. CISTERNS AND WELLS. Where there is no city water-supply reasonably accessible, there shall be provided one or more adequate cisterns or wells with a pump or other attachment for drawing water, but with no opening for drawing water with pails or buckets. Such cisterns or wells shall be furnished of such size and number and constructed and maintained in such manner as may be determined by the health officer.

NOTE: This is necessary in undeveloped communities of a suburban or rural character where there is no communal water supply and where it is necessary to utilize cisterns or wells. It has not been thought wise to attempt to outline in the law the detailed requirements as to the size or number of such cisterns or wells, but these details have necessarily been left to the local health officer.

Explana-
tion

§ 100. CATCH-BASINS. In the case of dwellings where, because of lack of city water-supply or sewers, sinks with running water are not provided inside the dwellings, one or more catch-basins for the disposal of waste water, as may be necessary in the opinion of the health officer, shall be provided in the yard or court, level with the surface thereof and at a point easy of access to the occupants of such dwelling.

NOTE: This is a provision similar to the preceding one and applies in similar communities where there is no city water or no sewer system, and where some system of disposing of waste water, and so forth, other than carrying it down and dumping it in the yard or emptying it out of the window should be provided. Catch-basins are a necessary temporary evil and should not be tolerated one moment beyond the introduction of a water and sewer system. The catch-basin that is referred to here is a small iron basin or grating sunk in the ground into which waste

Explana-
tion

water can be emptied and can drain under the surface of the ground.

§ 101. CLEANLINESS OF DWELLINGS. Every dwelling and every part thereof shall be kept clean and shall also be kept³ free from any accumulation of dirt, filth, rubbish, garbage or other matter in or on the same, or in the yards, courts, passages, areas or alleys connected with or belonging to the same. The owner¹ of every dwelling, and in the case of a private-dwelling the occupant thereof, shall thoroughly cleanse or cause to be cleansed all the rooms, passages, stairs, floors, windows, doors, walls, ceilings, privies, water-closets, cesspools, drains, halls, cellars, roofs and all other parts² of the said dwelling, or part of the dwelling of which he is the owner, or in the case of a private-dwelling the occupant, to the satisfaction of the health officer, and shall keep the said parts of the said dwelling in a cleanly condition at all times.

**Explan-
ation**

NOTE 1: This is an important provision and places upon the owner of all dwellings other than private dwellings the responsibility for the cleanliness of the building and premises. In the case of a private dwelling it is obvious that it is more reasonable to hold the occupant responsible. This provision, however, must be read in connection with section 145 which provides that if an occupant of a dwelling fails to comply with the provisions of the act he may be summarily evicted, in which event, the house being vacant, the health officer would look to the owner to clean up the unsanitary conditions before a new tenant is taken.

NOTE 2: It should be noted that in this section there is a detailed enumeration of all the various parts of the dwelling which are to be kept clean. While such enumerations are generally dangerous, this is safeguarded by adding the general "drag-net" provision at the end embracing every other part which may have been forgotten. There is a distinct advantage in this case in this detailed enumeration as it tends to indicate to the courts and to the enforcing officials the clear intent of the legislature, in

case there might be doubt in the minds of these officials as to the responsibility for the cleanliness of those parts of the building over which the owner might not seem to have control; namely, the apartments occupied by tenants.

NOTE 3: It would appear at first glance that the repetition of the words "and shall be kept" in the second line is unnecessary verbiage. This is not the case, and the insertion of these four words gives a totally different meaning to the provision than would be had if they were omitted. If omitted the section might be interpreted to mean that the dwelling shall be kept clean and free from any accumulation of dirt, filth, and so forth. This the court might hold to mean that accumulations should not be allowed. This is a very different thing from what is intended and what is said; namely, that all the parts of the building shall be kept clean and that in addition they are also to be kept free from accumulations of various kinds.

§ 102. WALLS OF COURTS. In multiple-dwellings the walls of all courts, unless built of a light color brick or stone, shall be thoroughly whitewashed by the owner or shall be painted a light color by him, and shall be so maintained. Such whitewash or paint shall be renewed whenever necessary, as may be required by the health officer.

NOTE: This requirement is for the purpose of improving the conditions of light in courts; it is also as a sanitary measure, a coat of whitewash being a most effective agent in doing away with dirt and germs.

Explana-
tion

§ 103. WALLS AND CEILINGS OF ROOMS. In all multiple-dwellings the health officer may require the walls and ceilings of every room that does not open directly on the street to be kalsomined white or painted with white paint when necessary to improve the lighting of such room and may require this to be renewed as often as may be necessary.

Explanation

NOTE: This is an important provision and is for the purpose of improving the lighting of rooms that are too dark, especially those in the older buildings. A coat of white paint on walls and ceilings will do wonders in lighting up a dark room. There are many basement rooms for which permits for human occupancy are denied because the rooms are too dark, the walls being painted the usual "tenement-house green," for which permits are ultimately granted when the walls are painted white; white paint does not absorb light as dark paint does and also radiates it more readily.

§ 104. WALL PAPER.¹ No wall paper shall be placed upon a wall or ceiling of any dwelling² unless all wall paper shall be first removed therefrom and said wall and ceiling thoroughly cleaned.

Explanation

NOTE 1: This section does not prohibit the use of wall paper. From a sanitary point of view it would be desirable to make such a prohibition in the case of the homes of the poor, but this is not possible as tenants in high-class flats and apartments as well as in tenements desire to decorate their homes in this way. The section, however, does prohibit putting on any new wall paper over existing wall paper. While this adds materially to the cost of decoration of rooms, the effect of the enforcement of such a provision is to encourage the painting of walls—a much more sanitary method—and to discourage the use of wall paper. Wall paper is objectionable from two points of view; first, because disease germs which may have been deposited there under previous tenancy are thus given a long lease of life and may affect the health of new tenants. This is especially so in the case of tuberculosis. Wall paper is further objectionable in the homes of the poor for the reason that it encourages vermin, as the sweet paste is especially agreeable to this form of insect life. In some cities as many as 13 layers of wall paper have been taken from one wall, and this not in a cheap tenement but in a high-class apartment house.

NOTE 2: Considerable opposition may develop to this requirement as involving unnecessary expense

on the owner, and especially upon working people who own their homes and live in single-family dwellings. If it develops that this opposition is very strong, it would be wise to make a concession and to exclude private dwellings from the application of the section. In such event the following concession is suggested:

CONCESSION 1: Change the word "dwelling" to "multi-
ple-dwelling" Concession

§ 105. RECEPTACLES FOR ASHES, GARBAGE AND RUBBISH.¹
The owner of every dwelling, and in the case of a private-dwelling the occupant, shall provide and maintain for said dwelling proper and suitable tight² metal cans, with covers, for holding ashes, rubbish, garbage, refuse and other matter. Chutes³ and bins⁴ for such purposes are prohibited.

NOTE 1: No provision is more important than this if conditions of cleanliness are to be maintained in and around the dwellings of the poor. Where proper receptacles are not provided in which to put waste material so that this may be promptly removed by the city authorities, the result is that it is piled up in unsightly and disgusting heaps in the back yard, or in the cellar, or alley, or some part of the out-premises. In the case of everything but a private dwelling it is obvious that the responsibility should be placed upon the owner for the furnishing of these cans. In a private dwelling, however, the occupant has complete control over the dwelling and should provide them. Objection may be raised in some cities to this simple and elementary provision, claim being made that the metal cans which have been provided have been stolen by the tenants and sold for junk. The cases where this has happened are rare and the plea is not worthy of consideration. The answer to such a plea is that the landlord should get a different class of tenants. Explanation

NOTE 2: It is highly desirable that tight metal cans should be required. Wooden tubs, boxes, or barrels such as are frequently provided are unsanitary and are sure to result in the garbage and

other refuse being distributed over the ground and premises. It is also of great importance that these cans shall be kept covered. The best type of can is one with a cover attached; that is, a hinged cover. This is not the usual type. Unless cans are kept covered cats and rats will feed upon their contents and distribute it over the premises. Flies also will swarm around it, thus increasing the fly nuisance and adding to the danger of transmission of disease.

NOTE 3: Garbage chutes are abominations. Intended originally as a convenience they have proved in practice to be nuisances because the garbage collects along the sides of the chute and gives rise to noxious odors.

NOTE 4: Garbage bins for the storage of garbage and other refuse material are equally objectionable, although it is the custom to have such bins in a number of cities. The idea of hoarding garbage and other refuse is repugnant to proper standards of sanitation. These waste products should be immediately removed from the premises and properly disposed of by the city authorities; it is certainly not desirable to keep such refuse in close proximity to the living quarters of the people.

§ 106. PROHIBITED USES.¹ No horse, cow, calf, swine, sheep, goat, chickens, geese or ducks shall be kept in any dwelling or part thereof. Nor shall any such animal be kept on the same lot or premises² with a dwelling except under such conditions as may be prescribed by the health officer. No such animal, except a horse, shall under any circumstances be kept on the same lot or premises with a multiple-dwelling.³ No dwelling or the lot or premises thereof shall be used for the storage or handling of rags⁴ or junk.

Explan-
ation

NOTE 1: It will not do to prohibit the keeping of all animals in a dwelling. People naturally desire to keep cats, dogs, and birds; but the undesirability of housing in the same building in which human beings reside any of the animals enumerated in this section is at once obvious and needs no supporting argument. All of the animals above mentioned have been found

in the houses of the poor in different cities at various times.

NOTE 2: When it comes to the keeping of these animals on the same premises with dwellings the question is different. In many of our cities, especially in the outlying sections, it will be very much desired to keep not only a horse but also cows and chickens and similar animals. So long as the conditions under which these animals are kept may be regulated by the health officer there is little likelihood of danger resulting.

NOTE 3: Animals should not however be kept on the same lot with a multiple dwelling. Such buildings are not a necessity in the undeveloped or rural portions of the community and therefore no hardship will result. Where multiple dwellings are built it means that many families or individuals will reside on a given piece of land. It is distinctly unwise and injurious to permit the keeping of animals in close proximity to many people.

NOTE 4: The prohibition against rag shops and junk shops and the storage of such material either in dwellings or on the premises needs no argument. Such places are a potent source of contagious disease and a fire menace, and should be strictly limited to business quarters and even there kept under close observation and control at all times.

NOTE 5: The evil of tenement house prostitution is not so general throughout the country that it has seemed necessary or desirable to include in this section a prohibition against the use of any part of a multiple dwelling for such purposes. In New York and some of our eastern cities which are distinctly tenement house cities this evil some years ago assumed such proportions that it became necessary to impose much stricter penalties for the committing of prostitution in buildings in which the respectable poor people dwell than attach to this offense in ordinary "houses of prostitution." While the evil is not widespread, it may develop at any time in any city and it can do no harm to embody in this law a provision dealing with this subject. If this is desired, the following variation is suggested. Add at the end of the section the following:

Variation

VARIATION 1: "No multiple-dwelling or the lot or premises thereof shall be used for purposes of prostitution or assignation."

§ 107. COMBUSTIBLE MATERIALS.¹ No dwelling, nor any part thereof, nor of the lot upon which it is situated, shall be used as a place of storage, keeping or handling of any article dangerous or detrimental to life or health; nor of any combustible article, except under such conditions as may be prescribed by the fire commissioner² under authority of a written permit issued by him. No multiple-dwelling³ nor any part thereof, nor of the lot upon which it is situated, shall be used as a place of storage, keeping or handling of feed, hay, straw, excelsior, cotton, paper stock, feathers or rags.

Explanation

NOTE 1: It will not do to prohibit outright the keeping of combustible articles, as this would prevent the reasonable storage of gasoline in a private garage at the rear of the lot behind a private dwelling. It would also prevent the sale of kerosene oil in a grocery store which might be located on the ground floor of an apartment house, or of benzine or alcohol in a drug store similarly located. It is essential, however, that the fire commissioner should have authority to regulate and control the conditions under which such articles may be kept or stored.

NOTE 2: The fire commissioner is the public official who will generally have jurisdiction over these matters. Where some other official has jurisdiction he should be substituted. In some cities the commissioner of public safety would be the appropriate person, in others the fire marshal.

NOTE 3: It should be noted that a clear distinction has been made between conditions which may be permitted in private dwellings and two-family dwellings and those which are allowed in multiple dwellings. In the latter case an absolute prohibition is made against the storage, keeping, or handling of certain articles dangerous from the point of view of fire. In addition to this absolute prohibition, all multiple dwellings are also subject to the provisions of the first part of this section, which apply to all classes of dwellings, and are general in their nature.

§ 108. CERTAIN DANGEROUS BUSINESSES. There shall be no transom, window or door opening into a public hall¹ from any portion of a multiple-dwelling where paint, oil, drugs² or spirituous liquors are stored or kept for the purpose of sale or otherwise.

NOTE 1: As the public halls and stairs in multiple dwellings are the danger point in case of fire, it is desirable to have no connection between them and stores in which such inflammable and explosive materials as paint, oil, drugs, or liquors are stored. The effect of this provision is to close the side door of the saloon where such side door leads into the tenement hallway. From a social point of view this is a distinct advantage. It also means that inside transoms or door openings must be filled in solid with the same material as the partition. Locking the door or nailing the transom will not satisfy the requirements.

Explan-
ation

NOTE 2: It may be the part of wisdom to exempt hotels from this provision. Otherwise claim may be made that it would not be possible to have a bar such as is usually found in a hotel, nor a drug store, as communication between the bar and public rooms, and frequently the hall, is usually direct. While this claim may be readily met by a slight change in the plans,—it is possible to so arrange the bar that it will not communicate directly with the public halls and stairs,—the issue is not worth contending about. It is simpler to exempt hotels. The following concession is therefore suggested. Add at the end of the section the following:

CONCESSION 1: "This provision shall not apply to hotels."

Concession

§ 109. JANITOR OR HOUSEKEEPER.¹ In any multiple-dwelling in which the owner thereof does not reside,² there shall be a janitor, housekeeper or other responsible person who shall reside in said house and have charge of the same, if the health officer shall so require.³

NOTE 1: This is one of the important provisions of the act from a sanitary point of view. In tene-

Explan-
ation

ments where there are many families, unsanitary conditions are bound to result if there is not some one living on the premises who is responsible for the maintenance of the public parts of the building—the halls, stairs, water-closets, and the out-premises. What is everybody's business is nobody's business, and individual tenants will feel no responsibility for the public parts of the building nor can they properly be held responsible.

NOTE 2: It should be noted that the requirements of this section will be fulfilled if some one of the tenants is designated by the owner as janitor or housekeeper. Exception is made in the case in which the owner resides in the house because in that case he will look after its condition far better than any janitor.

NOTE 3: In some cities an attempt is made to establish in the law a definite standard by the number of families in the house and to require a janitor on the premises in all cases where there are that many families or more. It is thought better, owing to the varying conditions which prevail in most communities, to leave this to the discretion of the health officer, who will have to answer to the public if unsanitary conditions exist and he has not required a resident janitor on the premises.

§ 110. OVERCROWDING.¹ If any room in a dwelling is² overcrowded the health officer may order the number of persons sleeping or living in said room to be so reduced that there shall be not less than SIX HUNDRED cubic feet³ of air to each adult and FOUR HUNDRED cubic feet of air to each child under twelve years of age occupying such room.

Explanation

NOTE 1: This is a very different provision from the one found in the laws of many American cities to the effect that no matter what the conditions, no room shall have less than 400 cubic feet of air space for each adult. To require arbitrarily that no room shall contain less than a certain amount of cubic air space for each occupant is to bring about in some cases unreasonable and absurd situations.* It is very

* For further discussion, see Housing Reform, pp. 29, 30.

doubtful whether a requirement of that nature if contested could be sustained as a reasonable exercise of the police power. The number of cubic feet of air space is not the sole standard as to the fitness of a room for human occupancy. In fact it is of comparatively minor importance in comparison with other elements. The character of the air, the frequency of its renewal, the opportunity for "through" ventilation, the reduction of high temperature, are the important things in room ventilation. The question of reducing the number of occupants of a room is a matter which necessarily must be left to be determined by the health officer upon the conditions found in individual rooms, which vary greatly. One room may be small, dark, and unventilated; another large and with good light and ventilation. A "room" has not as yet been standardized. The scheme of this section, therefore, is to leave entirely to the health officer the power to reduce the number of occupants in a room so that there shall not be more than a proper number.

NOTE 2: It should be observed that this power can only be exercised if the room is actually overcrowded. This at once becomes a question of fact and enables the owner to go into court and establish whether his room is overcrowded or not, with the burden of proof upon the health officer to show that the room is overcrowded. This is as it should be. It is an extreme power and should not be exercised unless the health officer can clearly demonstrate to the satisfaction of fair-minded people that the conditions are such as to warrant action.

NOTE 3: Numerous opponents of housing reform who will not read the law carefully will assume that this provision, because it mentions a certain number of cubic feet, is similar to the provision found in other laws with which they are familiar, and will oppose this on the ground that this is a more stringent regulation than is found in most laws, which as a rule call for 400 cubic feet of air space for each adult and 200 for each child under twelve years of age. It is important to make plain to such persons the points in which this provision differs from the requirements that have been customary in previous laws, as above set forth.

§ 111. LODGERS PROHIBITED.¹ No dwelling nor any part thereof shall be used for the letting of lodgings without the consent in writing² of the health officer. Except in multiple-dwellings of Class B,³ no person not a member of the family shall be taken to live⁴ within any apartment, group or suite of rooms without such consent. It shall be the duty of the owner⁵ in the case of multiple-dwellings, and of the occupant in the case of private-dwellings and two-family-dwellings, to see that the provisions of this section are at all times complied with, and a failure to so comply on the part of any tenant after due and proper notice from said owner or from the health officer shall be deemed sufficient cause for the summary eviction of such tenant and the cancellation of his lease.

**Explan-
ation**

NOTE 1: Heretofore in America no satisfactory method of coping with one of the most serious evils that we have, namely, the lodger evil, has as yet been adopted. This section is an attempt to deal with this evil in an adequate way, and is a distinct departure from the methods heretofore followed in this country. Former methods have placed the responsibility solely upon the tenant. It has been largely because of this that such efforts at legal regulation have failed, as the courts have been unwilling to hold as criminal offenders the poor foreigners among whom this practice chiefly prevails, and who always plead poverty and ignorance when brought into court. It is significant that the only two instances in which an effort is made to hold the tenant responsible for violation of the law, namely, in the case of room overcrowding and the placing of encumbrances upon fire-escape balconies, are the only provisions of our tenement laws which have proved unenforceable and have baffled the health officers of all our cities. Whereas the other sections of the law where the owner is held responsible, have always been found to be capable of proper enforcement. This section deliberately places the responsibility upon the owner in the case of multiple-dwellings for the presence in his house of lodgers and boarders in the individual apartments of the tenants. It will be claimed by some that it is unreasonable to hold the

owner responsible in this way and that he cannot know of the presence of outsiders in the families to whom he has rented his apartments. This is plausible but not sound. Where there is a janitor on the premises, and there should be one in the case of all tenement houses, the class of buildings in which this evil is chiefly found, the janitor always knows whether the tenants are taking in lodgers or boarders. Just as it has been found practicable in the New York law to hold the owner responsible for the moral character of his tenants and make him liable for a penalty of \$1,000 for a failure to evict prostitutes, so it is equally practicable to make him responsible for room overcrowding. A full discussion of this subject and the methods under which this provision would work will be found in a paper on Room Overcrowding, in *Housing Problems in America*.*

NOTE 2: The plan elaborated here calls for a written permit from the health officer wherever it is desired to take lodgers or boarders. Complete prohibition is not possible, as there are circumstances where this is necessary, and where the conditions are such that no harm to the community will result. An absolute prohibition against taking boarders or lodgers would, moreover, undoubtedly be unconstitutional.

NOTE 3: It is obvious that multiple dwellings of Class B,—hotels, boarding houses, lodging houses, and so forth,—buildings which exist solely for the purpose of taking lodgers and boarders, must be exempted from the provisions of this section; but even these buildings will have to get a permit from the health officer. This should not be deemed a hardship, as lodging houses and hotels in most cities are now under this necessity. It is, however, an extension of police power to require similar permits from boarding houses, but it is a wise extension.

NOTE 4: Persons who are seeking to oppose the law may raise the question that the provisions of this section will prohibit some friend from visiting them. This is a fanciful and strained construction. No court or public official will take such a position for a moment. What the section does is to prohibit the

* *Housing Problems in America*, Vol. II, pp. 58-78. New York, National Housing Association Publication, 1912.

taking of outsiders to live in the family as a business for which compensation is had.

NOTE 5: As is fully explained in note 1, the responsibility in the case of multiple dwellings is placed upon the owner. In the case of private dwellings and two-family dwellings it is obvious that the responsibility must necessarily be placed upon the occupant.

§ 112. INFECTED AND UNINHABITABLE DWELLINGS TO BE VACATED.¹ Whenever it shall be certified² by an inspector or officer of the health department that a dwelling is infected³ with contagious disease, or that it is unfit for human habitation, or dangerous to life or health by reason of want of repair, or of defects in the drainage, plumbing, lighting, ventilation, or the construction of the same, or by reason of the existence on the premises of a nuisance likely to cause sickness among the occupants of said dwelling, or for any other cause, the health officer may⁴ issue an order requiring all persons therein to vacate⁵ such house within not less than TWENTY-FOUR HOURS nor more than TEN DAYS for the reasons to be mentioned in said order. In case such order is not complied with within the time specified, the health officer may cause said dwelling to be vacated. The health officer whenever he is satisfied that the danger from said dwelling has ceased to exist, or that it is fit for human habitation, may revoke said order or may extend the time within which to comply with the same.

Explan-
ation

NOTE 1: This section is one of the most important sections in the whole law. It gives the health department under proper conditions the right to vacate any house which is unfit for human habitation and to keep it vacant until it is made fit; and permits this without application to the courts. The health department can send its own officers or can call upon the police department to furnish policemen and send them to the house, if its orders are not complied with, and turn the tenants into the street and keep them out. This is done every month in New York City and is the only effective method of dealing with extreme

cases. It is an extreme power which should only be used where conditions clearly warrant it.

NOTE 2: Before such action is taken formal certification must be made by an officer of the health department reciting the conditions which exist; such certification should be filed before the action is taken and should be a public record of the department.

NOTE 3: The various reasons which warrant the vacation of a house are carefully enumerated:

1. If the house is infected with contagious disease. This does not mean the mere presence of one case of tuberculosis in the house; it would be necessary to show that the house itself was infected.

2. If it is unfit for human habitation for any reason whatever.

3. If it is dangerous to life or health for various reasons, namely, want of repair, defects in drainage, plumbing, lighting, ventilation or construction; or if it is dangerous to life or health because of a nuisance on the premises likely to cause sickness among the occupants. This does not mean that the house can be vacated because of the mere presence of a nuisance. The nuisance must be one that is likely to cause sickness among the occupants of the dwelling, and the health officer must be able to show that the house is dangerous to life or health by reason of this state of affairs.

4. Finally, if the house is dangerous to life or health for any cause in addition to those enumerated, the health officer may vacate it.

NOTE 4: It should be carefully observed that this is a power given to the health officer to be exercised in his discretion. Some housing reformers want this provision made mandatory so as to require the health officer to vacate houses in every case whenever a report is made to him along these lines by an employee of the department. Such a provision would be unwise and dangerous. It would place in the hands of subordinate employees tremendous power and open the door for unlimited graft. As this power is an extreme one it should be scrutinized with the greatest care and be safeguarded so as to prevent abuse. Reports of this kind made by subordinates should be verified in each case personally by the head of the department before vacating a house. This should be

an invariable rule; it is wise policy also to take photographs of the bad conditions.

NOTE 5: Attention is called to the fact that this provision authorizes the health officer to vacate a house summarily without court proceedings. This is what is intended. In many communities it will seem an extreme and unusual power. It is, however, essential. In cases where unsanitary conditions are allowed to exist for long periods of time no other remedy will bring those responsible to terms. In some cities it may be necessary to permit owners to have the right of appeal to the courts. From a practical point of view this is highly undesirable. It may, however, in a few states be a legal necessity.

NOTE 6: In exercising the power to vacate houses the health officer should be careful not to put the tenants out of the building just after they have paid their month's rent in advance. The vacation proceedings should be timed with reference to this so that unnecessary hardship and confiscation of poor people's property will not be involved. Similarly care should be taken not to vacate houses in extreme winter weather as by postponing the order this hardship would not be encountered. Persons are cautioned against making any change in the phraseology of this section. It is of vital importance to keep it exactly as it is, as it has stood the test in some of our eastern cities of over thirty years' practice.

§ 113. REPAIRS TO BUILDINGS, ET CETERA.¹ Whenever any dwelling or any building, structure, excavation, business pursuit, matter or thing, in or about a dwelling, or the lot on which it is situated,² or the plumbing, sewerage, drainage, light or ventilation thereof, is in the opinion of the health officer in a condition or in effect³ dangerous or detrimental to life or health, the health officer may declare that the same to the extent he may specify is a public nuisance, and may order the same to be removed, abated, suspended, altered or otherwise improved or purified as the order shall specify. In addition to the above powers⁴ the health officer may also order or cause any dwelling or excavation, building, structure, sewer, plumbing pipe,

passage, premises, ground, matter or thing, in or about a dwelling, or the lot on which it is situated, to be purified, cleansed, disinfected, removed, altered, repaired or improved. If any order of the health officer issued under the authority of the provisions of this act is not complied with, or so far complied with as he may regard as reasonable, within five days after the service thereof, or within such shorter time as he may designate, then such order may be executed⁶ by said health officer through his officers, agents, employees or contractors.

NOTE 1: This section is of almost equal importance with the previous section. It greatly supplements it as well as the general powers possessed by health departments with reference to nuisances. The section is necessary because there are often cases where there are conditions in a house which do not make it unfit for human habitation, bad though they are, and which even perhaps do not in themselves constitute a nuisance in the usual acceptation of that term, but which should be remedied and remedied promptly. Many of these instances it is not possible to anticipate in drafting a law and it is necessary, therefore, to have this general "drag-net" power conferred upon the health department. Take the case, for instance, where in the winter time most of the panes of glass are out of the windows in an individual apartment in a tenement house. The health officer could with difficulty prove that the house was unfit for human habitation because of this condition. It would similarly be difficult to establish the condition as a nuisance, yet it is obvious that the condition should be remedied and that the effect of it upon the people living in such rooms is bound to be injurious to health. There are no provisions in the act outside of the general powers conveyed by this section which would warrant the health officer in requiring these window panes to be made whole. If it were attempted under the authority of section 97, which requires that the dwelling shall be kept in repair in all its parts, and an order issued to repair the window panes, the owner could evade compliance by removing all glass from the panes. There could then be no question of

Explanation

"repair" involved. Other instances will readily occur to the reader.

NOTE 2: The powers herein conferred are intended to apply to all of the conditions which may exist not only in the dwelling itself but those on the same lot or in connection with it. Every board of health should of course have similar powers with regard to all classes of buildings, but this act concerns itself only with dwellings.

NOTE 3: The phrase "in a condition or in *effect* dangerous to life or health" is of importance, as the words "in effect" will also provide for potential evils as well as actual ones.

NOTE 4: The second sentence of this section, "The health officer may also order," confers broad powers upon the health officer to require practically any improvement to an existing dwelling which in his opinion is appropriate. The word "also" is essential in this sentence. Without it there is danger that the courts might construe this sentence as explanatory or further illustrative of the powers conferred in the first sentence, whereas it is intended by this provision to confer additional powers.

NOTE 5: It will be observed that power is conferred upon the health officer to execute his own orders and have the work done if the owner fails to comply within a reasonable time. This should be read in connection with the latter part of section 144 where general power to execute his own orders is conferred upon the health officer.

§ 114. FIRE-ESCAPES. The owner of every multiple-dwelling on which there are fire-escapes shall keep them in good order and repair, and whenever rusty shall have them properly painted with two coats of paint. No person shall at any time place any incumbrance of any kind before or upon any such fire-escape.

§ 115. SCUTTLES, BULKHEADS, LADDERS AND STAIRS. In all multiple-dwellings where there are scuttles or bulkheads, they and all stairs or ladders leading thereto shall be easily accessible to all occupants of the building and shall be kept free from incumbrance and ready for use at

all times. No scuttle and no bulkhead door shall at any time be locked with a key, but either may be fastened on the inside by movable bolts or hooks.

NOTE: Lives are frequently lost in fires, especially in tenement houses, because when the occupants attempt to escape to the roof through the scuttle or bulkhead they find the scuttle nailed down or the bulkhead door locked and the key in the janitor's pocket. They then become trapped in the top-floor hallway and lose their lives. It is essential, therefore, that scuttles should be so arranged that they can be easily raised by the tenants in case of fire and that bulkhead doors shall be kept unlocked. There must, however, be some means of fastening them, otherwise thieves can get in from the outside and rob the tenants. A movable bolt or a hook will be found to be an adequate means of fastening the scuttle or door to keep intruders out, and will permit the immediate opening of the door from the inside in the event of fire.

Explana-
tion

ARTICLE V

IMPROVEMENTS

In this article will be found those improvements in the older buildings required as a matter of compulsory legislation.

§ 120. ROOMS, LIGHTING AND VENTILATION OF.¹ No room in a dwelling¹¹ erected prior² to the passage of this act shall hereafter be occupied for living purposes unless it shall have a window of an area of not less than EIGHT square feet³ opening directly upon the street, or upon a⁴ rear yard not less than TEN feet deep, or above the roof of an adjoining building, or upon a court or side yard of not less than TWENTY-FIVE square feet in area, open to the sky without roof or skylight, unless such room is located on the top floor⁵ and is adequately lighted and ventilated by a skylight opening directly to the outer air. Except that a room which does not comply with the above provisions may be occupied if provided with a sash window⁶ of not less than fifteen square feet in area, opening into an adjoining room in the same apartment, group or suite of rooms, which latter room either opens directly on the street or on a rear yard of the above dimensions, or itself connects by a similar sash window or series of windows with such an outer room. Said sash window shall be a vertically-sliding pulley-hung⁷ sash not less than three feet by five feet between stop-beads,⁸ both halves shall be made so as to readily open,⁹ and the lower half shall be glazed with translucent glass,¹⁰ and so far as possible it shall be in line with windows in the said outer room opening on the street or rear yard so as to afford a maximum of light and ventilation.

NOTE 1: This provision is an attempt to deal in a practical way with dark, unventilated rooms in existing houses. In effect it means that every room in an existing house shall either have a window to the outer air, namely, the street, yard, or a court of a certain size, or shall have a large window communicating with an adjoining room in the same apartment, thus securing some improvement in the existing conditions of light and ventilation. The ideal thing to do would be to prohibit the use of any room for living purposes which does not have a window directly on the outer air, but this is not practicable. Such rooms will be found in varying numbers in different localities, in buildings erected at different times and in accordance with the laws which were in force and effect when the houses were built. In many cases it is physically impossible to provide a window to the outer air in such rooms without tearing down the building. The courts would probably hold such a requirement to be confiscatory and void. The provision of this section is not subject to that objection and is a reasonable requirement.

Explan-
ation

NOTE 2: This section applies only to methods of lighting and ventilating rooms erected prior to the passage of the act. Rooms in dwellings erected subsequent to the passage of the act must conform to the requirements of Article 11 dealing with new buildings.

NOTE 3: Every variety of condition will be found in existing dwellings. Some rooms will be found which have windows to the outer air but the windows do not contain 8 square feet in area. In such cases all that will be necessary will be to enlarge the windows.

NOTE 4: It should be noted that if the room opens on a yard or court on the adjoining premises, so long as that yard or court is not built up and it is of the size prescribed by the act, it is a satisfactory compliance with the terms of this section, as all that is sought is to see that dark rooms in the older dwellings shall be made light and shall have as much ventilation as possible. In some cases rooms will be found which have windows opening to the rear yard but the yard will be smaller than 10 feet in depth. In such cases a sash window must be provided in the partition leading to the adjoining room. Similarly exist-

ing rooms may open on courts smaller in size than 25 square feet in area or courts which are covered over at the top. In this case the room can be made legal by either removing the covering at the top and having the court open to the air or by providing a sash window in the partition leading to the adjoining room.

NOTE 5: In the case of rooms on the top floor which

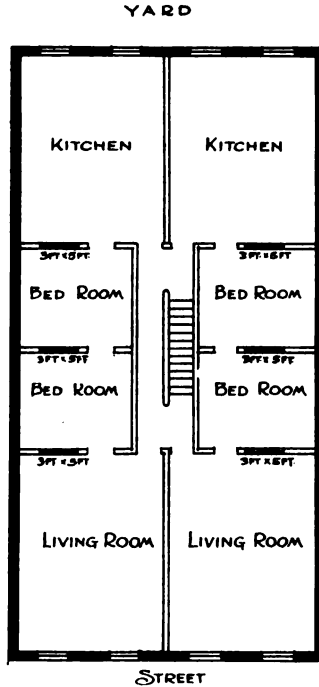


FIGURE 40
SASH WINDOWS PROVIDED BETWEEN ROOMS

are now dark and unventilated, the simplest and easiest way to remedy the conditions is to provide ventilating skylights in the different rooms. This can be done at comparatively slight expense.

NOTE 6: In any event, no matter what the conditions or difficulties it is always practicable to cut a window in the partition separating the inner or dark room from the room next adjoining, which in most

cases will be a room that opens directly on the outer air. Sometimes the inner room is two or three rooms removed from the outer wall of the building. In that case there must be a series of windows in line with each other leading from the inner room to the outer room so that the light and air may penetrate to the room in question, as indicated in the diagram on page 202.

NOTE 7: The reason for requiring the sash window in the partition to be a double-hung sash is because a hinged window under such circumstances is apt to be broken and will therefore generally be nailed up in the cheaper class of houses, thus defeating the plan to improve the ventilation of the inner room. The double-hung sash will also insure better circulation of the air, as by utilizing it properly it can be kept open both at top and bottom with the window acting as a diaphragm, dividing the air currents.

NOTE 8: The requirement that the window shall not be less than 3 feet by 5 feet is to insure a window of sufficient size to admit enough light and air. A larger window than this, wherever it is possible to get it, is very desirable.

NOTE 9: The law will not be complied with by removing the partition between the inner room and the room next adjoining and making one room out of the two. This is objectionable and should be prevented, as it means that the inner room will be used as an alcove and that a curtain will presumably be used between the two rooms shutting out both light and air. The evils of the alcove room have been fully discussed under section 33.

NOTE 10: The requirement that the lower half of the window shall be glazed with translucent glass is for the purpose of privacy, thus removing the objection which would otherwise be raised that persons could not undress in their bedrooms without being seen in the outer room.

NOTE 11: This section applies to all classes of dwellings. It may be objected to by the owners of private houses. A dark room in a private dwelling, however, is just as dangerous as in a multiple dwelling. The effect of dark rooms on tuberculosis germs is the same in all cases. If, however, the opposition to this provision seems serious and it is desired to make con-

cessions to these interests, the following concession may be made. Substitute for the following words at the beginning of the section, which now read "No room in a dwelling erected prior," the following words:

Concession CONCESSION 1: "No room in a two-family-dwelling or in a multiple-dwelling of Class A erected prior"

§ 121. PUBLIC HALLS AND STAIRS, LIGHTING AND VENTILATION OF.¹ In all dwellings erected prior to the passage of this act the public halls and stairs² shall be provided with as much light and ventilation to the outer air as may be deemed practicable by the health officer, who may order the cutting in of windows and skylights and such other improvements⁴ and alterations in said dwellings as in his judgment may be necessary and appropriate to accomplish this result. All new³ skylights hereafter placed in such dwellings shall be provided with ridge ventilators having a minimum opening of FORTY square inches and also with either fixed or movable louvres or with movable sashes; all such skylights and windows shall be of such size as may be determined to be practicable by said health officer.

Explanation

NOTE 1: The evils of dark public halls and stairs have already been fully set forth from the point of view of sanitation, fire danger and morality. This section is enacted for the purpose of bringing as much light and air as possible into the existing dark public hallways. The conditions vary so greatly in each building that it is not practicable to attempt to lay down in the act a definite, rigid method by which this shall be accomplished in all cases. In some cases it may be by the cutting in of a window to the street or yard, in others to the yard of an adjoining building; while in many others the only improvement that can be had will be by means of a ventilating skylight in the roof. What the section does is to give to the health authorities the power to improve in every way practicable the lighting and ventilation of these existing public hallways.

NOTE 2: This section applies only to *public* halls

and stairs. It will therefore not apply in the case of most private dwellings and two-family houses.

NOTE 3: The requirement with regard to the construction of skylights does not apply to existing skylights but only to a new one which may be placed in the hallway of an existing dwelling. The size of the skylight will consequently vary with the conditions in each building. There is no advantage in requiring a large skylight where there is a small stairwell or no well. Under such circumstances this would only light the hall on the top floor.

NOTE 4: A simple and inexpensive way of materially improving the conditions of light in the dark halls is to remove the wooden panels in the doors leading from the individual apartments to the halls and substitute ground glass or wire glass panels in their place. While this does not make the halls light it does make them much lighter. It has not been thought wise to require this alteration as a matter of mandate, but for the reason set forth in note 1 it has seemed best to leave this to the health officer as one method to employ where it proves to be advantageous.

§ 122. SINKS. In all dwellings² erected prior to the passage of this act, the woodwork¹ enclosing sinks shall be removed and the space underneath said sinks shall be left open. The floor and wall surfaces beneath and around the sink shall be put in good order and repair, and if of wood shall be kept well painted with light-colored paint.

NOTE 1: This is a requirement compelling the removal of all enclosing woodwork from sinks in existing dwellings. It is necessary because where sinks are thus enclosed, the woodwork as a rule becomes saturated with water and slops and is a harboring place for dirt, vermin and disease germs. Moreover, if the plumbing is defective and is enclosed the defects are not observed. In order to show up accumulations of dirt and filth underneath them it is wise to require the floor to be painted white.

Explan-
ation

NOTE 2: Objection will probably be made to this provision so far as it applies to private dwellings and two-family houses. There will probably be no ob-

jection to compliance so far as kitchen sinks are concerned even in these houses, but there may be to sinks in butlers' pantries. If this point is pressed, the following concession can wisely be made. After the words in the second line "the woodwork enclosing sinks" insert a comma and the following:

Concession

CONCESSION 1: "except sinks in butlers' pantries,"

§ 123. WATER-CLOSETS. In all dwellings erected prior to the passage of this act, the woodwork enclosing all water-closets shall be removed from the front of said closets, and the space underneath the seat shall be left open. The floor or other surface beneath and around the closet shall be put in good order and repair and if of wood shall be kept well painted with light-colored paint.

Explanation

NOTE: This is a similar provision and is necessary for the reasons discussed in the preceding section. The necessity for it, of course, is greater in the case of water-closets than it is in the case of sinks.

§ 124. PRIVY VAULTS, SCHOOL-SINKS AND WATER-CLOSETS.^{1,2} Whenever a connection with a sewer is possible, all³ privy vaults, school-sinks,⁷ cesspools or other similar receptacles used to receive fecal matter, urine or sewage, shall before January first, nineteen hundred and —, ⁴ with their contents, be completely removed and the place where they were located properly disinfected under the direction of the health officer. Such appliances shall be replaced by individual water-closets of durable non-absorbent material, properly sewer-connected, and with individual traps, and properly connected flush tanks providing an ample flush of water to thoroughly cleanse the bowl. Each such water-closet shall be located inside⁵ the dwelling or other building in connection with which it is to be used, in a compartment completely separated from every other water-closet, and such compartment shall contain a window of not less than FOUR square feet in area opening directly to the street, or rear yard or on a side yard or court of the minimum sizes prescribed in sec-

tions twenty-three and twenty-four of this act. The floors of the water-closet compartments shall be as provided in section forty-five of this act. Such water-closets shall be provided in such numbers as required by section ninety-three of this act. Such water-closets and all plumbing in connection therewith shall be sanitary in every respect and, except as in this act otherwise provided, shall be in accordance with the local ordinances and regulations in relation to plumbing and draining.⁶ Pan, plunger and long hopper closets will not be permitted. No water-closet shall be placed out of doors.

NOTE 1: This is the most important provision that can be enacted with regard to the improvement of the older buildings. It is one which will as a rule create much opposition, as it involves owners in considerable expense; yet all cities should unhesitatingly enact it. It requires existing privy vaults, whether sewer-connected or not, and all similar receptacles to be done away with within a certain time, preferably a year, and new modern sanitary water-closets installed inside of the building in their place.

Explan-
ation

NOTE 2: The constitutional question may be raised with regard to this requirement but cities can adopt it with perfect confidence that they are on safe ground. The question has been settled for all time. A similar provision was put into effect in New York City in 1901. Its constitutionality was tested and the case went through all the courts of the state and ultimately went to the supreme court of the United States. The law was uniformly sustained in each of these courts. (*Tenement House Department vs. Moeschon*, 203 U. S. 583.)

NOTE 3: It should be noted that the provision as herein stated applies to all privy vaults in the city, whether they are used in connection with dwellings, or commercial buildings, or in any other way. This is for the reason that there is no way otherwise to safeguard the members of the community living in residential sections from the danger of infection through the medium of the house fly. For further discussion see note 10 under section 45.

NOTE 4: It is only proper to allow owners a reason-

able time in which to make this alteration. It involves in some cases the preparation of plans by an architect and structural alteration of the building. It also involves in all cases expense to the owner. In most communities it is the custom to allow one year's time in which to make these changes. The method of expressing this as adopted in this section is one that should be observed. It should be noted that the requirement is, that these vaults shall be removed *before* a certain date. This does not prohibit the removal of them at an earlier date if the health authorities require it. They should be free to require it. In this connection see section 10. There may be circumstances where it is necessary to require the removal of such vaults in a less time than one year.

NOTE 5: This provision prohibits the construction of outdoor water-closets in place of the vaults. The outdoor closet is almost as great an evil as the vault. This matter is fully discussed in note 10 under section 45. The only place for a water-closet is inside the house. There is always a place inside the building, though owners will say there is not. In the case of private dwellings and two-family houses there is of course no difficulty. In the case of multiple dwellings where there are many families the problem is not so simple. Space can always be found, however, by giving up one room on the ground floor or on the top floor to a group of closets, having each closet separately ventilated to the outer air and in a separate compartment, or it can be done by putting one or two closets on each floor off the public hallway or between the two apartments, depending upon the number of families on a floor. This is the better way. In whatever way it is done it generally means alteration and readjustment and sometimes the giving up of rentable floor space. It always means, however, an improvement to the building, for which the tenants are willing to pay. By a slight increase in the monthly rental for each family, the interest on the money thus expended can be easily obtained. Irrespective of any of these considerations, the improvement is one which public safety demands. No city can call itself civilized which tolerates privy vaults.

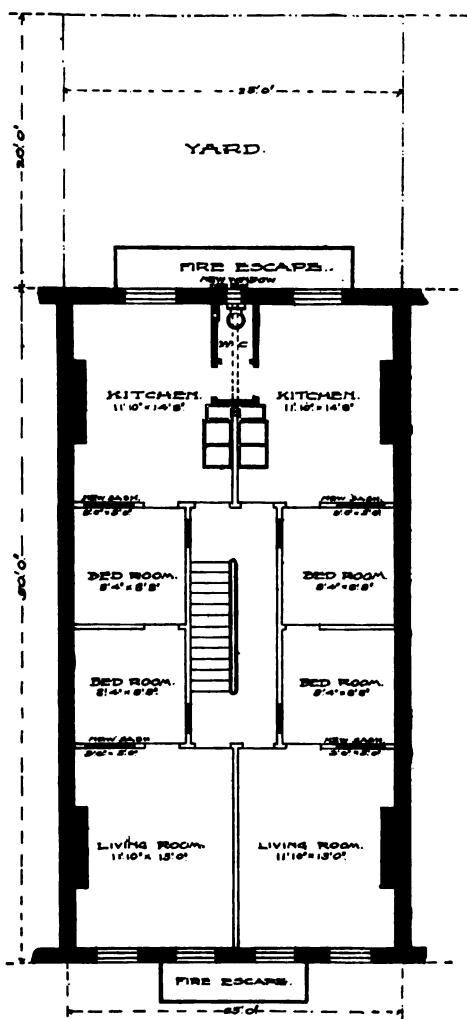


FIGURE 41
PUTTING WATER-CLOSETS INSIDE THE HOUSE BETWEEN TWO FLATS
IN A FOUR-ROOM DEEP HOUSE

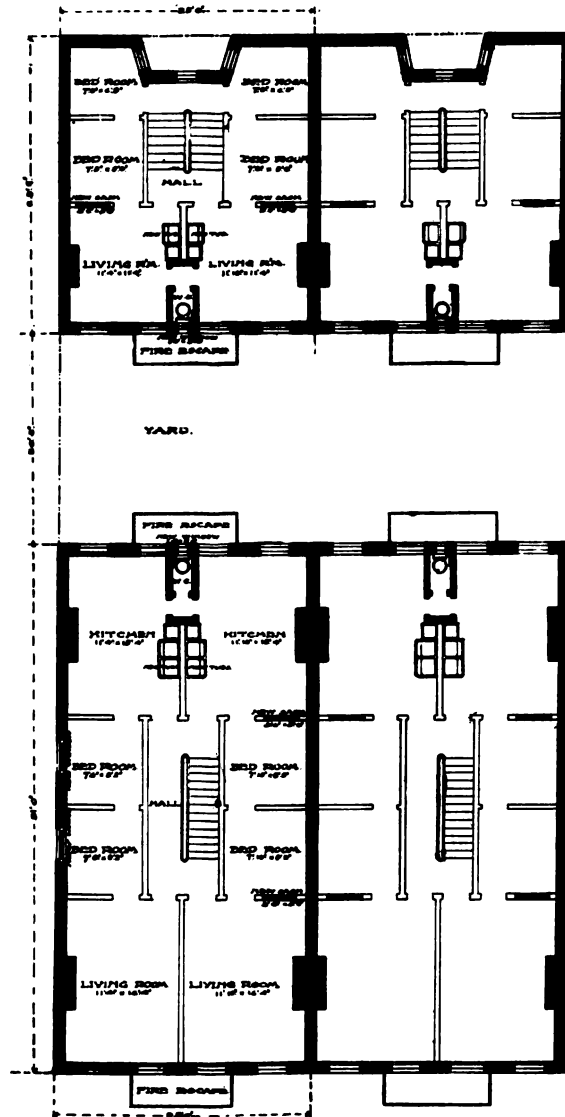


FIGURE 42
PUTTING WATER-CLOSETS INSIDE THE HOUSE BETWEEN TWO FLATS
IN A FRONT AND REAR HOUSE

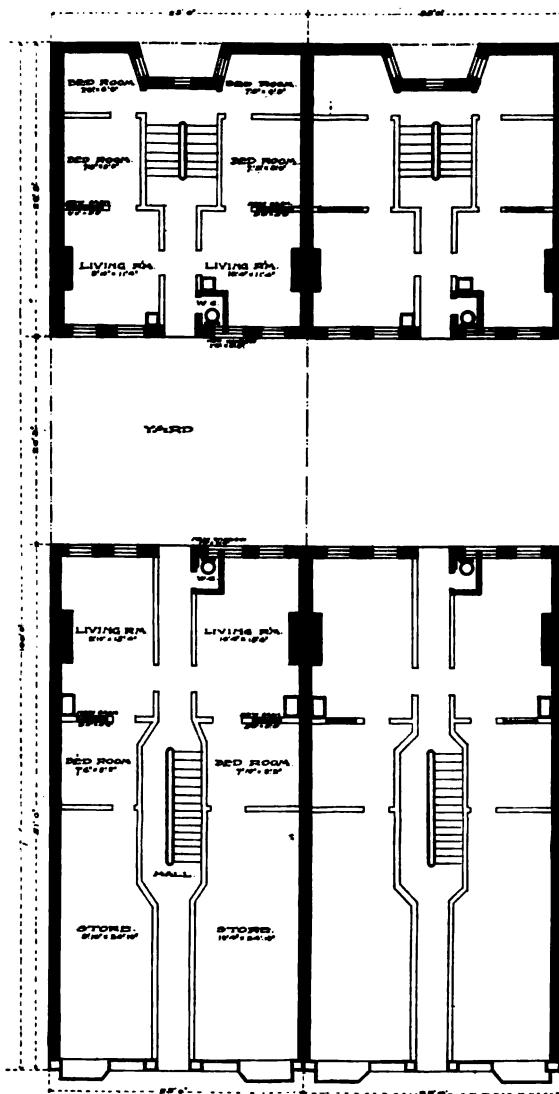


FIGURE 43
PUTTING WATER-CLOSETS INSIDE THE HOUSE OFF THE PUBLIC HALL.
PLAN OF ENTRANCE FLOOR

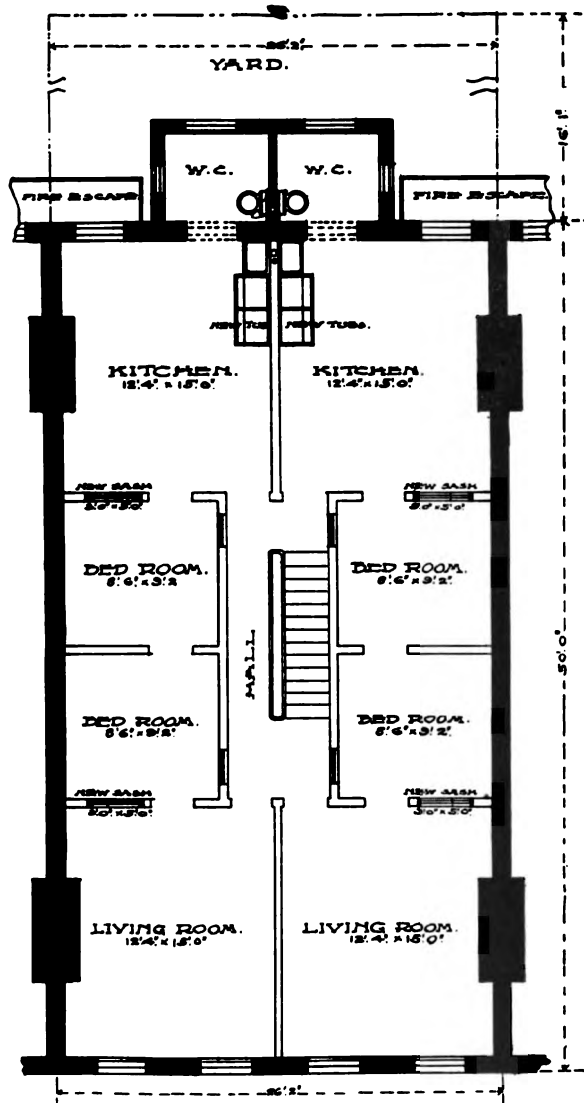


FIGURE 46
PUTTING WATER-CLOSETS INSIDE THE HOUSE
Building an extension for them at the rear

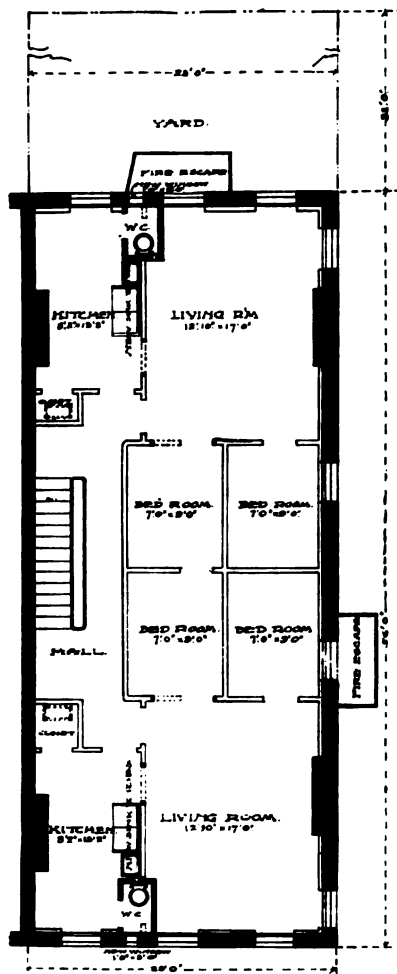


FIGURE 47
PUTTING WATER-CLOSETS INSIDE THE HOUSE
Two water-closets in an old dwelling used as a tenement

NOTE 6: The new closets that must be installed are required to comply with the provisions relative to closets that would be installed in a new dwelling. The reasons for the various requirements as laid down in this section are all discussed in the discussion relative to new closets under section 45.

NOTE 7: A "school-sink" is nothing more nor less than a sewer-connected privy vault. It derives its name from the fact that it was originally used in connection with the toilet accommodations provided for the public schools in New York City; it is called a sink because the trough which receives the contents of the privy is an iron trough or sink sunk in the ground.

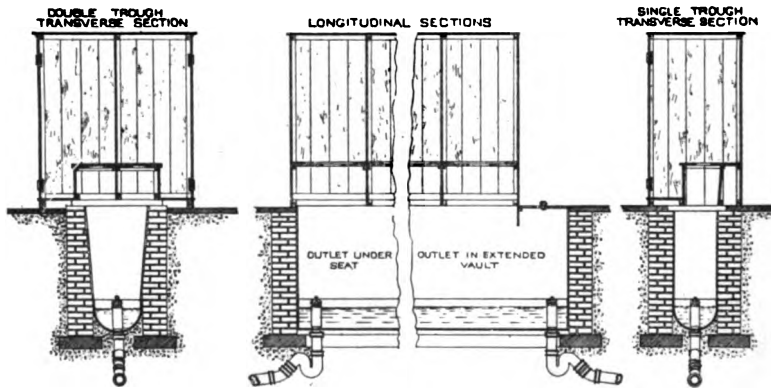


FIGURE 48
A SCHOOL-SINK

§ 125. BASEMENTS AND CELLARS. The floor of the cellar or lowest floor of every dwelling shall be free from dampness and, when necessary, shall be concreted with not less than FOUR inches of concrete of good quality and with a finished surface. The cellar ceiling of every dwelling shall be plastered, when so required by the health officer.

Explan-
ation

NOTE: Damp cellars cause disease. Where cellar conditions are good and the cellar floor for instance is of rock, it is not necessary to concrete it, but whenever necessary the floor should be concreted to prevent dampness. A concrete floor 4 inches thick is the standard in most cities. If objection is made to this

on the ground of expense, the standard can be reduced to 3 inches without danger. The important thing is that the concrete shall be of good quality and that the job shall be well done. The requirement for a finished surface is for the purpose of preventing germs and filth collecting upon a rough floor. The reason for requiring the cellar ceiling to be plastered is to prevent cellar air from permeating the rest of the building. It is for the purpose of protecting the health of the occupants of the building living upstairs and not merely for the welfare of the persons who may live in the basement or first floor. It will not do to require the cellar ceiling to be plastered in every case, however, because sometimes it is a fireproof ceiling made of fireproof blocks. Plaster in that case would be an unnecessary expense. In other cases the ceiling is nicely sheathed with matched boards. Sometimes it is covered with a good metal ceiling. The question is one which necessarily must be left to the discretion of the enforcing officials to apply the remedy appropriate to the varying conditions found.

§ 126. SHAFTS AND COURTS. In every dwelling where there is a court or shaft of any kind, there shall be at the bottom of every such shaft and court a door giving sufficient access to such shaft or court to enable it to be properly cleaned out. Provided that where there is already a window giving proper access it shall be deemed sufficient.

NOTE: In tenement houses especially the occupants frequently throw waste material out of the windows and this accumulates at the bottom of the court or shaft. This creates unsanitary conditions and frequently is a fire danger. Unless it is easy to get at this space and clean it out it is apt to be neglected.

Explanation

§ 127. EGRESS. Every multiple-dwelling¹ exceeding one story in height shall have at least two independent ways of egress constructed and arranged as provided in section fifty-one of this act. In the case of multiple-dwellings erected prior to the passage of this act where it is not practicable to comply in all respects with the provisions of that section, the superintendent of buildings shall make such

requirements as may be appropriate to secure proper means of egress from such multiple-dwellings for all the occupants thereof. No existing fire-escape shall be deemed a sufficient means of egress unless the following conditions are complied with:²

- (1) All parts of it shall be of iron, cement or stone.
- (2) The fire-escape shall consist of outside balconies which shall be properly connected with each other by adequate stairs or stationary³ ladders, with openings not less than TWENTY-FOUR by TWENTY-EIGHT inches.
- (3) All fire-escapes shall have proper drop ladders or stairways from the lowest balcony of sufficient length to reach a safe landing place beneath.
- (4) All fire-escapes not on the street shall have a safe and adequate means of egress from the yard or court to the street or alley or to the adjoining premises.
- (5) Prompt and ready access shall be had to all fire-escapes, which shall not be obstructed by bath-tubs, water-closets, sinks or other fixtures, or in any other way.

All fire-escapes that are already erected which do not conform to the requirements of this section may be altered⁵ by the owner to make them so conform in lieu of providing new fire-escapes, but no existing fire-escape shall be extended or have its location⁶ changed except with the written approval of the superintendent of buildings.⁴ All fire-escapes hereafter erected⁷ on any multiple-dwelling shall be located and constructed as prescribed in section fifty-two of this act.

**Explan-
ation**

NOTE 1: This section deals with means of egress in existing multiple dwellings. It does not apply to other classes of dwellings, nor does it apply to multiple dwellings unless over one story in height. Owing to the varying conditions which exist in the different kinds of multiple dwellings erected at different times in each city, it is not practicable without imposing undue hardships, to lay down a precise and exact statement of conditions which must be complied with in regard to means of egress from such buildings. It is necessary, therefore, to leave to the enforcing of-

ficials in this case the power to require whatever may be necessary in order to secure proper means of egress for all the occupants of the building.

NOTE 2: An attempt has been made, however, to enumerate certain fundamental requirements which must be present in order to constitute a fire-escape a proper means of egress. These fundamental requirements it is not within the power of the enforcing official to modify or waive.

NOTE 3: The reasons for making the requirements which are enumerated in the five subdivisions of this section have been fully set forth in connection with the discussion of the details of new fire-escapes in section 52. It will be noted that stationary ladders are here permitted connecting the balconies, whereas in new fire-escapes they are forbidden and stairs required. It would be a hardship to require existing fire-escapes now equipped with ladders to be altered and stairs substituted, as this would practically mean the complete demolition of the fire-escapes and the erection of new ones.

NOTE 4: The proper official to enforce this section is the superintendent of buildings; where no such official exists, the fire marshal or fire commissioner. In this connection see section 153; also section 2, subdivision 20.

NOTE 5: It is deliberately intended to permit the alteration of existing fire-escapes which do not conform in every respect to the requirements of this section, so as to impose upon owners as little expense as possible.

NOTE 6: It is obvious that the owner should not be permitted to change the location of fire-escapes without having the matter first submitted to the responsible public official and passed upon by him.

NOTE 7: Where entirely new fire-escapes are erected they must comply in every respect with section 52 governing the construction of fire-escapes for new dwellings.

§ 128. ADDITIONAL MEANS OF EGRESS. Whenever any multiple-dwelling is not provided with sufficient means of egress in case of fire the superintendent of buildings shall order such additional means of egress as may be necessary.

Explan-
ation

NOTE: This is a broad "drag-net" power conferred upon the enforcing officials to enable them to deal with cases which may arise which it has not been possible to foresee in drafting the law. The power is supplementary to the powers already conferred.

§ 129. ROOF EGRESS; SCUTTLES, BULKHEADS, LADDERS AND STAIRS. Every flat-roofed multiple-dwelling exceeding one story in height erected prior to the passage of this act shall have in the roof a bulkhead, or a scuttle which shall be not less than TWO feet by THREE feet in size. All such bulkheads and scuttles shall be fireproof or covered on the outside with metal and shall be provided with stairs or stationary ladders leading thereto and easily accessible to all occupants of the building. No scuttle or bulkhead shall be located in a room, but shall be located in the ceiling of the public hall on the top floor, and access through the same to the roof shall be direct and uninterrupted. When deemed necessary by the superintendent of buildings scuttles shall be hinged so as to readily open. Every bulkhead in such multiple-dwelling shall have stairs with a guide or hand-rail leading to the roof, and such stairs shall be kept free from incumbrance at all times. No scuttle and no bulkhead door shall at any time be locked with a key, but either may be fastened on the inside by movable bolts or hooks. All key-locks on scuttles and on bulkhead doors shall be removed.

Explan-
ation

NOTE: This is a requirement for means of roof egress in existing multiple dwellings. It does not apply to other kinds of dwellings. The various points in this section have been fully discussed in connection with section 53 and need no further illustration. The requirement that scuttles shall be hinged in certain cases is to meet the situation where the scuttles are too heavy to be easily raised by the ordinary person.

ARTICLE VI

REQUIREMENTS AND REMEDIES

In this article will be found the legal requirements, penalties for violations of the law, procedure, et cetera.

NOTE: The tendency of many housing reformers when they come to this article is to skip it, as it deals with matters which as a rule are not understood by the layman. This is not, however, safe procedure. The rest of the law will be found to be of little effect unless most of these remedies are enacted. This article should be especially referred to a local lawyer to make sure that it is in harmony with the legal practice in that city, and should be modified to suit the local practice. There are no sections in this article which can wisely be omitted. An effort to simplify and condense the law on this point is sure to produce disastrous results in the end.

Explan-
ation

§ 140. PERMIT TO COMMENCE BUILDING.¹ Before the construction or alteration of a dwelling, or the alteration or conversion of a building for use as a dwelling, is commenced, and before the construction or alteration of any building or structure on the same lot² with a dwelling, the owner, or his agent or architect shall submit to the health officer a detailed statement in writing, verified³ by the affidavit of the person making the same, of the specifications for such dwelling or building, upon blanks or forms to be furnished by such health officer, and also full and complete copies of the plans of such work. With such statement there shall be submitted a plat of the lot⁴ showing the dimensions of the same, the location of the proposed building and all other buildings on the lot. Such state-

ment shall give in full the name and residence, by street and number, of the owner⁵ or owners of such dwelling or building and the purposes for which such dwelling or building will be used. If such construction, alteration or conversion is proposed to be made by any other person than the owner of the land in fee, such statement shall contain the full name and residence, by street and number, not only of the owner of the land, but of every person interested in such dwelling, either as owner, lessee or in any representative capacity. Said affidavit shall allege that said specifications and plans are true and contain a correct description of such dwelling, building, structure, lot and proposed work. The statements and affidavits herein provided for may be made by the owner, or by the person who proposes to make the construction, alteration or conversion, or by his agent or architect. No person, however, shall be recognized as the agent of the owner, unless he shall file with the said health officer a written instrument signed by such owner designating him as such agent.⁶ Any false swearing⁷ in a material point in any such affidavit shall be deemed perjury. Such specifications, plans and statements shall be filed⁸ in the said health department and shall be deemed public records, but no such specifications, plans or statements shall be removed from said health department. The health officer shall cause all such plans and specifications to be examined. If such plans and specifications conform to the provisions of this act, they shall be approved by the health officer and a written certificate to that effect shall be issued by him to the person submitting the same. Such health officer may, from time to time, approve changes in any plans and specifications previously approved by him, provided the plans and specifications when so changed shall be in conformity with law. The construction, alteration or conversion of such dwelling, building or structure, or any part thereof, shall not be commenced until the filing of such specifications, plans and statements, and the approval thereof, as above provided. The construction, alteration

or conversion of such dwelling, building or structure shall be in accordance with such approved specifications and plans. Any permit or approval which may be issued by the health officer but under which no work has been done above the foundation walls within one year from the time of the issuance of such permit or approval, shall expire by limitation.⁹ Such health officer shall have power to revoke or cancel any permit or approval in case of any failure or neglect to comply with any of the provisions of this act, or in case any false statement or representation is made in any specifications, plans or statements submitted or filed for such permit or approval.

NOTE 1: This section provides for the procedure with regard to the filing of plans and specifications with the health officer before building a new dwelling, or altering an existing one, or converting some existing building into a dwelling. Explan-
ation

NOTE 2: It also applies to the construction of a building other than a dwelling on the same lot, so as to enable the health officials to see that the requirements of the law are observed and that the necessary open spaces between such buildings are maintained.

NOTE 3: The phrase "verified by the affidavit of the person making the same" means that the statement shall be sworn to before a notary public or a commissioner of deeds.

NOTE 4: The requirement that with the statement there shall be submitted a plat of the lot showing its dimensions and certain other facts is important. A common practice with unscrupulous builders and architects is to file false dimensions of their lots, and where the adjoining premises are not built upon the inspector, when he inspects the job, is often deceived. The requirement that a plat of the lot be filed will avoid this and enables the department to verify the property lines through the insurance maps or through the records of some title company. It also places the department in a much stronger position in subsequent litigation if an attempt at deception is made.

NOTE 5: The name and address of the owner and other persons responsible are of course essential.

NOTE 6: No person should be permitted to file

plans unless his authority so to do is authorized in writing by the owner. This is an important provision. Without it, it has frequently happened that the architect who has filed the plans has made changes in them without authority from the owner in order to get the plans approved. The owner has then built the building in accordance with the original plans which were disapproved, and when called to account by the department has claimed that he never knew that changes had been made and that he did not authorize the architect to make them. Under these circumstances it is difficult to hold anybody responsible. The requirement mentioned will prevent any such evasion.

NOTE 7: The declaration that any false swearing shall be deemed perjury is probably not of very great value in view of the common practice which prevails in many of our courts where day by day witnesses perjure themselves and nothing happens; but it may have the moral value of frightening builders and architects who would otherwise be inclined to resort to questionable practices.

NOTE 8: It is necessary to provide that the plans shall be kept on file in the office of the health department because in some cities the delightfully ingenuous method is practiced by which a builder submits the plans to the superintendent of buildings, the superintendent of buildings approves them, then the plans are taken away and the superintendent of buildings has no means of knowing whether the building is erected in accordance with the plans or not. Building inspection under these circumstances is farcical, but this is the only method that is employed in a number of cities. It is obvious that the plans to be of value must remain in the health department at all times. The provision that the plans shall be deemed public records will enable the housing reformer when he wishes to get after the public official, in case the law is not being complied with, to get at the records and examine them. Without such a clause the claim might be made by a health officer who wished to block such an inquiry that he could not permit examination of the plans as these were the property of the architect who had filed them.

NOTE 9: It is good practice to have permits expire by limitation after an interval of one year. Without

this provision, the filing of plans and the securing of their approval might give the right to build under the same plans ten years later although the law might have been changed radically in the interval. This of course is not desirable.

§ 141. CERTIFICATE OF COMPLIANCE.¹ No building hereafter constructed as or altered into a dwelling shall be occupied in whole or in part for human habitation until the issuance of a certificate² by the health officer that said dwelling conforms in all respects to the requirements of this act relative to dwellings hereafter erected. Such certificate shall be issued within fifteen days after written application therefor if said dwelling at the date of such application shall be entitled thereto.

Explan-
ation

NOTE 1: This is a provision of much importance as it assures the building of new houses in strict compliance with the law, by preventing their occupancy without a certificate from the health officer to the effect that the dwelling has been built in accordance with law. If the community wants its buildings built right this is the way to bring it about. No one can properly raise any objection to this requirement, though the whole building fraternity in the locality will secretly oppose it, as few buildings are erected according to law at the present time. No valid argument can be advanced against this section as it is the builder's business to know what the law is before he builds and to comply with it. Having filed plans with the health officer and secured their approval, it is his further duty to build in accordance with them. If he wants to make changes he should get the consent of the health officer before such changes are made. The provisions of this section should be strictly enforced and owners should not be permitted to put tenants in new buildings or to occupy them themselves without such a certificate.

NOTE 2: Where buildings are built on building loans, as most of them are in our cities, efforts should be made to get the title companies, banks, insurance companies, lawyers, and capitalists who make such loans to refuse to make the final payment until the

builder can show this final certificate from the health officer. This system has been in practice in New York City since 1901 and has brought about most beneficial results.

§ 142. UNLAWFUL OCCUPATION.¹ If any building hereafter constructed as or altered into a dwelling be occupied in whole or in part for human habitation in violation of the last section, during such unlawful occupation no rent² shall be recoverable by the owner or lessee of such premises for said period, and no action or special proceeding shall be maintained therefor or for possession of said premises for non-payment of such rent, and said premises shall be deemed unfit for human habitation and the health officer may² cause them to be vacated accordingly.

Explanation

NOTE 1: This seemingly drastic provision is necessary in order to prevent the occupancy of new buildings built contrary to law and which do not have a certificate as required in section 141. The health officer should not hesitate to vacate buildings thus unlawfully occupied.

NOTE 2: It is not made mandatory upon the health officer to vacate buildings thus occupied, because it is recognized that there may be one or two technical violations of the law which are easily and quickly remedied and that a mere service of notice upon the owner will bring about compliance without resorting to the extreme remedy of vacation. Where there are serious violations, however, buildings should be quickly vacated. The only satisfactory thing is not to allow them to be tenanted.

NOTE 3: If objection is made to the clause that no rent shall be recoverable by the owner and that no action for the recovery of the premises or for non-payment of rent may be had, on the ground that this is too drastic, there is no harm in permitting a concession in this respect. In such case the following concession is suggested. After the words "unlawful occupation" omit the following:

Concession

CONCESSION 1: "no rent shall be recoverable by the owner or lessee of such premises for said period, and no action or special proceeding shall be maintained therefor

or for possession of said premises for non-payment of such rent, and"

§ 143. PENALTIES FOR VIOLATIONS.¹ Every person who shall violate or assist in the violation of any provision of this act shall be guilty of a misdemeanor² punishable by imprisonment for TEN days for each and every day that such violation shall continue, or by a fine of not less than TEN dollars nor more than ONE HUNDRED dollars if the offense be not wilful, or of TWO HUNDRED AND FIFTY dollars if the offense be wilful, and in every case of TEN dollars for each day after the first that such violation shall continue, or by both such fine and imprisonment in the discretion of the court. The owner of any dwelling, or of any building or structure upon the same lot with a dwelling, or of the said lot, where any violation of this act or a nuisance exists, and any person who shall violate or assist in violating any provision of this act, or any notice or order of the health officer³ shall also jointly and severally for each such violation and each such nuisance be subject to a civil penalty of FIFTY dollars.⁴ Such persons shall also be liable for all costs, expenses and disbursements⁵ paid or incurred by the health department, by any of the officers thereof or by any agent, employee or contractor of the same, in the removal of any such nuisance or violation. Any person who having been served with a notice or order to remove any such nuisance or violation shall fail to comply with said notice or order within FIVE days after such service, or shall continue to violate any provision or requirement of this act in the respect named in said notice or order, shall also be subject to a civil penalty of TWO HUNDRED AND FIFTY dollars. For the recovery of any such penalties, costs, expenses or disbursements, an action may be brought in any court of civil jurisdiction.⁶ In case the notice required by sections one hundred and forty-eight and one hundred and forty-nine of this act is not filed, or in case the owner, lessee or other person having control of such

dwelling does not reside within the state, or cannot after diligent effort be served with process therein, the existence of a nuisance or of any violation of this act, or of any violation of an order or a notice made by said health officer, in said dwelling or on the lot on which it is situated, shall subject said dwelling and lot⁷ to a penalty of TWO HUNDRED AND FIFTY dollars. Said penalty shall be a lien⁸ upon said house and lot.

**Explan-
ation**

NOTE 1: This important section of the law provides for the penalties incurred by persons violating it. It should be noted, in the first place, that every *person* who violates any provision of the act is liable under it. This means not only owners, but tenants, also contractors, builders, architects and their assistants or workmen. It even applies to public officials. If the health officer or superintendent of buildings violates it in failing to enforce it, he is similarly liable for these penalties.

This provision is one to point out to owners when they make claim, as they always do, that the tenant is never held responsible and that all responsibility is placed upon the owner. This should answer that argument.

NOTE 2: Two kinds of penalties are provided, criminal and civil. Under the criminal procedure a violation of the act is punishable by either imprisonment for ten days for each day that the violation continues or by a fine of not less than \$10 or more than \$100; but where the violation is wilful, the fine is made \$250, or the offender may be punished by both fine and imprisonment in the discretion of the court.

NOTE 3: It should be observed that the penalties which attach to the violation of this law also attach to the failure to comply with any notice issued by the health officer, which is a very distinct broadening of his powers. The courts, of course, would hold that this must be construed as relating to orders and notices served in relation to dwellings.

NOTE 4: Any person violating the law is also subject to a civil penalty of \$50 and to a further civil penalty of \$250 if he fails to comply with a notice or order from the enforcing official within five days after service thereof.

NOTE 5: Liability is also incurred for any necessary disbursements or expenses incurred by the health department in remedying unsanitary conditions. This applies where the health officer is unable to get prompt compliance from the owner and has to remove the violation himself through his own employes or contractors, as is authorized in the last part of section 144.

NOTE 6: An important provision is the one which gives the department the right to bring an action in any court of civil jurisdiction. This means that these actions need not be brought always in the minor courts where the judges are often not sympathetic to the enforcement of housing laws.

NOTE 7: The somewhat novel procedure is adopted by which where it is difficult to find the owner, or in the case of an absentee owner, it is possible to bring proceedings *in rem*, that is, against the dwelling itself, following the practice that prevails in the admiralty law.

NOTE 8: The requirement that penalties imposed in such cases shall be a lien on the property is necessary, as otherwise the owner might transfer the property and thus escape the penalty.

§ 144. PROCEDURE.¹ Except as herein otherwise specified, the procedure for the prevention of violations of this act or for the vacation of premises unlawfully occupied, or for other abatement of nuisance in connection with a dwelling, shall be as set forth in charter and ordinances. In case any dwelling, building or structure is constructed, altered, converted or maintained in violation of any provision of this act or of any order or notice of the health officer, or in case a nuisance exists in any such dwelling, building or structure or upon the lot on which it is situated, said health officer may institute any appropriate action² or proceeding to prevent such unlawful construction, alteration, conversion or maintenance, to restrain, correct or abate such violation or nuisance, to prevent the occupation of said dwelling, building or structure, or to prevent any illegal act, conduct or business in or about such dwelling or lot. In any such action or proceeding said health officer may by affidavit setting forth the facts apply to

the supreme court or to any justice thereof for an order granting the relief for which said action or proceeding is brought, or for an order enjoining all persons from doing or permitting to be done any work in or about such dwelling, building, structure or lot, or from occupying or using the same for any purpose until the entry of final judgment or order. In case any notice or order issued by said health officer is not complied with, said health officer may apply to the supreme court³ or to any justice thereof for an order authorizing him to execute and carry out⁴ the provisions of said notice or order, to remove any violation specified in said notice or order, or to abate any nuisance in or about such dwelling, building or structure or the lot upon which it is situated. The court or any justice thereof is hereby authorized to make any order specified in this section. In no case shall the health department, health officer, or any officer or employee thereof, or the city, be liable⁵ for costs in any action or proceeding that may be commenced in pursuance of this act. The actions, proceedings and authority of the health officer shall at all times be regarded as in their nature judicial, and shall be treated as *prima facie* just and legal.⁶

Explanation

NOTE 1: It is deliberately planned in this and other sections to give to the enforcing officials in their fight against unsanitary conditions every weapon known to modern or ancient warfare. The health officer should be armed with rifle, shot gun, automatic revolver, howitzer, stiletto, dirk, cutlass, and poignard. It is true that he will seldom wish to use all of these; certainly not all at once; but there are troublesome cases where he may need to use powers which he would ordinarily not think of using. One great advantage of giving such broad powers to the enforcing official is that it deprives him completely of the excuse that he has not sufficient power to enable him to remedy the conditions. This is a favorite excuse of incompetent public officials in all branches of civic work. On the other hand, housing reformers need have no fear of such powers being abused. The cases where a health officer has exceeded his powers are so rare as to

be negligible. The ordinary health officer is much more likely to err on the other side and fail to use his powers because of "pressure" or opposition of interests affected.

NOTE 2: Under the provisions of this and other sections the health officer may use any or all of the following methods in trying to bring about compliance with the law. He may sue the responsible person for a penalty in a civil suit; he may arrest the offender and put him in jail; he may stop the work in the case of a new building, and prevent its going on; he may prevent the occupancy of a building and keep it vacant until such time as the conditions complained of are remedied; he can evict the occupants of a building where conditions are contrary to law and prevent its reoccupancy until the conditions have been cured; and finally, he can hire workmen and go in and remedy the defects himself, charging the cost to the owner. All of these things a health officer should be given power to do. No one of them is unnecessary. For further discussion of this subject see Housing Reform.*

NOTE 3: It should be observed that under the provisions of this section the health officer is not limited to bringing actions in the minor courts, where frequently unsatisfactory results are obtained. Instead if he so desires he can bring an action in the higher courts.

NOTE 4: The power to hire laborers and do the work himself is an important one, especially in cases where nuisances exist which are dangerous to the community and the owner refuses or neglects to comply with reasonable promptness. This is especially important in the case of a privy vault where an entire neighborhood may be injured by its presence or where there are accumulations of filth and garbage in back yards and the owner cannot be brought to remove them.

If the health officer is to do such work, however, provision must be made for a contingent fund out of which he can pay the contractors as otherwise this power will be found of little effect. It is not advised that this method be generally employed but only in emergencies.

* Housing Reform, pp. 138-144.

NOTE 5: The provision that the city officials shall not be liable for suits for damages because of their official action is a very proper one. Without this provision it might be easy for an owner to scare a timid health officer by threatening personal prosecution with the result of stopping the issuance of orders necessary for the protection of the health of the community.

NOTE 6: The requirement that the actions, proceedings and authority of the health officer shall be deemed just and legal is an important one and saves a great deal of red tape in the authentication of papers of the health department. It is proper that the court should enter upon the hearing of the case with the assumption that the city officials are acting in good faith. It is not like a case of private litigation.

§ 145. TENANT'S RESPONSIBILITY. If the occupant of a dwelling shall fail to comply with the provisions of this act after due and proper notice from the health officer, such failure to comply shall be deemed sufficient cause for the summary eviction of such tenant by the owner and the cancellation of his lease.

**Explan-
ation**

NOTE: This is an important and necessary provision so far as it relates to conditions for which the occupants of dwellings are responsible and over which they have control. This means especially conditions of uncleanness, accumulations of filth, and so forth. It properly gives the owner a club to hold over the delinquent tenant's head. Where he fails to clean up and the owner evicts him and the dwelling becomes vacant, then of course the duty of cleaning up rests on the owner before a new tenant is taken into the house.

§ 146. LIENS. Every fine imposed by judgment under section one hundred and forty-three of this act upon the owner of a dwelling shall be a lien¹ upon the real property in relation to which the fine is imposed from the time of the filing of a certified copy of said judgment in the office of the clerk of the county in which said dwelling is situated, subject only to taxes, assessments and water rates and to

such mortgage and mechanics' liens as may exist thereon prior to such filing; and it shall be the duty of the health officer upon the entry of said judgment to forthwith file the copy as aforesaid, and such copy, upon such filing, shall be forthwith indexed by the clerk in the index of mechanics' liens.

NOTE 1: All penalties that may be imposed by judgment are made liens upon the property. This is necessary as otherwise there would be no way of collecting them, as the owner could transfer the property to a dummy. Judgments under such circumstances would have no terror for owners who refused to obey the law, and civil proceedings, as well as criminal proceedings where fines are imposed, would soon lose their value as a means of securing law enforcement.

Explanation

NOTE 2: Care should be taken to see that the method prescribed here is in harmony with the local practice.

§ 147. LIS PENDENS.¹ In any action or proceeding instituted by the health officer, the plaintiff or petitioner may file in the county clerk's office of the county where the property affected by such action or proceeding is situated, a notice of the pendency of such action or proceeding. Said notice may be filed at the time of the commencement of the action or proceeding, or at any time afterwards before final judgment or order, or at any time after the service of any notice or order issued by said health officer. Such notice shall have the same force and effect as the notice of pendency of action provided for in the code of civil procedure. Each county clerk with whom such notice is filed shall record it, and shall index it to the name of each person specified in a direction subscribed by the corporation counsel. Any such notice may be vacated upon the order of a judge or justice of the court in which such action or proceeding was instituted or is pending, or upon the consent in writing of the corporation counsel. The clerk of the county where such notice is filed is hereby directed to mark such notice and any record or docket

thereof as canceled of record, upon the presentation and filing of such consent or of a certified copy of such order.

Explanation

NOTE 1: The purpose of this provision is to make public the fact that there is litigation with regard to a particular building and that there are violations of law which the city is trying to have removed, and thus prevent unscrupulous owners from "unloading" the property upon innocent purchasers who might buy in ignorance of the fact that there were these existing violations. This provision should be differentiated from the ordinary filing of a *lis pendens* (suit pending) after the entry of final judgment, which of course can always be done without any special provision in an act of this kind. What this section does is to permit the filing of such notice at the beginning of the action, not waiting until after judgment has been rendered. This enables the health department, where they have reason to believe that the owner is likely to evade compliance, to file a *lis pendens* immediately upon the service of its first notice.

NOTE 2: Care should be taken to see that the provisions of this section harmonize with the local practice.

§ 148. REGISTRY OF OWNER'S NAME. Every owner of a dwelling and every lessee of the whole house or other person having control of a dwelling, shall file in the health department a notice containing his name and address and also a description of the property, by street number or otherwise as the case may be, in such manner as will enable the said department easily to find the same; and also the number of apartments in each house, the number of rooms in each apartment and the number of families occupying the apartments.

Explanation

NOTE: This is an important section and is essential to a proper enforcement of sanitary laws. As the responsibility for compliance rests in most cases upon the owner, it is of vital concern to the health department that the name and address of every person responsible for the maintenance of sanitary conditions in the city should be quickly ascertainable. Unless this informa-

tion is kept on file in the health department much time and energy are wasted in a search for the names and addresses of owners. Years ago in one of our eastern cities in order to meet this situation a law was passed requiring the posting of the owner's name and address in a conspicuous place inside of the entrance door of every tenement house, but this provision in practice did not work. It was difficult to enforce and subjected owners to a vast amount of solicitation from advertising agents and persons who wished to sell goods to them. It also opened up possibilities of blackmail in connection with the purchase of property. The law was subsequently repealed. The provision found in this code has been found to work admirably in practice. No owner of property can with reason object to a requirement that he shall register his name and address with the public officials, especially with the health department. The health department should see that this section is strictly enforced.

§ 149. REGISTRY OF AGENT'S NAME. Every owner, agent or lessee of a dwelling may file in the health department a notice containing the name and address of an agent of such house, for the purpose of receiving service of process, and also a description of the property by street number or otherwise as the case may be, in such manner as will enable the health department easily to find the same. The name of the owner or lessee may be filed as agent for this purpose.

NOTE: This is quite a different provision from the one in the preceding section, though it may seem very similar at first glance. Instead of imposing a duty upon the owner, this grants him a privilege and enables the owner of property for his own convenience to file in the health department the name of a person to whom he wishes all departmental notices to be sent.

Explana-
tion

§ 150. SERVICE OF NOTICES AND ORDERS. Every notice or order in relation to a dwelling shall be served FIVE days before the time for doing the thing in relation to which it shall have been issued. The posting of a copy of such

notice or order in a conspicuous place in the dwelling, together with the mailing of a copy thereof on the same day that it is posted, to each person, if any, whose name has been filed with the health department in accordance with the provisions of sections one hundred and forty-eight and one hundred and forty-nine of this act at his address as therewith filed, shall be sufficient service thereof.

**Explana-
tion**

NOTE: This permits legal service by the posting of a copy of the notice in the dwelling itself in addition to mailing a copy to the person whose name is registered in the health department, as required by section 148. It thus does away with the delay and expense that are usual in cases where personal service is required. In view of the fact that legal service can be made in this way, an added incentive is afforded owners to register their names in the department, as otherwise they are likely to have no copy of orders served upon them except by chance seeing a copy that may be posted on the wall of the building of which they are the owner. In such event they have no one to blame but themselves and the courts will hold them liable, as if they had been personally served.

§ 151. SERVICE OF SUMMONS. In any action brought by the health officer in relation to a dwelling for injunction, vacation of the premises or abatement of nuisance, or to establish a lien thereon, it shall be sufficient service of the summons to serve the same as notices and orders are served under the provisions of the last section; provided, that if the address of any agent whose name and address have been filed in accordance with the provisions of section one hundred and forty-nine of this act is in the city in which the dwelling is situated, then a copy of the summons shall also be delivered at such address to a person of proper age, if upon reasonable application admittance can be obtained and such person found; and provided also, that personal service of the summons upon the owner of such dwelling shall be sufficient service thereof upon him.

**Explana-
tion**

NOTE: This simply provides that the modes of service authorized in the preceding section for notices

§§ 152, 153 REQUIREMENTS AND REMEDIES

and orders shall also be legal for the service of summonses. Both provisions are based upon the assumption that owners of residence property are responsible for the maintenance of their property and that they must accept such responsibility when they purchase it and that the duty of living up to that responsibility is imposed primarily upon them and not upon the public officials.

§ 152. INDEXING NAMES. The names and addresses filed in accordance with sections one hundred and forty-eight and one hundred and forty-nine shall be indexed by the health officer in such a manner that all of those filed in relation to each dwelling shall be together and readily ascertainable. The proper city authorities shall provide the necessary books and clerical assistance for that purpose and the expense thereof shall be paid by the city. Said indexes shall be public records, open to public inspection during business hours.

NOTE: This provision is necessary, otherwise the financial authorities of the city will neglect to make proper appropriations for the health department and the card records giving information as to the names and addresses of owners will not be kept up, the health officer not being provided with proper means to do the work.

Explanation

§ 153. ENFORCEMENT.¹ The provisions of this act shall be enforced in each city by the health officer,² except that the superintendent of buildings shall enforce sections fifty, fifty-one, fifty-two, seventy-nine, eighty, one hundred and twenty-seven, one hundred and twenty-eight and one hundred and twenty-nine. An action may also be brought and proceedings taken for the enforcement of this act by any taxpayer³ of said city.

NOTE 1: There will probably be great difference of opinion in reference to this section. The scheme outlined here with reference to the enforcement of the act contemplates its enforcement in its entirety (with the exception of those provisions which relate

Explanation

to means of egress and fire-escapes) by the health department. This is done deliberately. While very plausible reasons can be advanced for a division of responsibility between the health officer and superintendent of buildings, or similar official, such division of responsibility does not work out advantageously in actual practice. It is claimed, for example, that the superintendent of buildings, whose duty it is to see that all new structures and those altered are built in compliance with the law, should enforce those provisions of this act which deal with new structures or with alterations, and that the health department should confine itself to the securing of sanitary conditions in existing houses. From many points of view this is logical, but it is not desirable. It is quite true that the building officials concern themselves with new buildings and with nothing else, as a rule. It is also true that the health officials concern themselves with the maintenance of sanitary conditions in existing buildings and not with new buildings, but notwithstanding this fact it is necessary that the health officials of the community should enforce all of the provisions of a housing law except those which deal with fire-escapes and means of egress. Practically all the other provisions, excepting the provisions of Title 3 of Article 11 entitled Fire Protection, deal with sanitary conditions; that is, with making sure that adequate light and ventilation are secured, that rooms are large enough and properly arranged, and that sanitary conditions of various kinds are maintained. The health officials are the only persons who are really competent to determine these questions. There are, moreover, no practical difficulties in the way of this plan of enforcement, so far as this law is concerned, as the law does not concern itself with those technical phases of building construction which are usually found in building codes and which it might be difficult to have an ordinary sanitary inspector pass upon. A sanitary inspector, however, is quite as competent to measure a court and determine whether it is 8 feet wide or not as is a building inspector; he is quite as competent to measure a room and see if it contains 90 square feet and is 9 feet high as is a building inspector; and so with the other provisions of the

act which deal with new buildings. It is true that the provisions of Title 3 of Article II, dealing with Fire Protection, do more properly belong in the building department, but as the health inspector has to inspect the building to see that the other requirements are being complied with, it has seemed best to place the enforcement of all the provisions of the housing law in the hands of the health officials, with the one exception of fire-escapes and means of egress, thus making a clean-cut division between the duties of these two officials. Under this plan the superintendent of buildings enforces the building code, the health officer enforces the housing law. The reasons which lead to these conclusions will be found fully set forth in Housing Reform.*

NOTE 2: In some cities it may be more appropriate to place the responsibility for the enforcement of the law upon the health "department" rather than upon the health officer. As a rule the health officer is in most places the chief executive officer of the health department, but in some cities this is not the case and he occupies a more or less subordinate position. The matter should be adjusted to suit the local conditions.

NOTE 3: The provision contained in the last sentence of this section, giving the right to a taxpayer to institute an action for the enforcement of the act, is a very valuable provision and will prove of great service where public officials are inclined to be lax or dilatory.

§ 154. POWERS CONFERRED. The powers conferred by this act upon the commissioner of public safety, the health officer, city engineer and the superintendent of buildings shall be in addition to the powers already conferred upon said officers, and shall not be construed as in any way limiting their powers except as provided in section six.

NOTE: This provision is necessary because in some cities it has been claimed that the powers conferred by an act of this kind are in lieu of powers which

Explana-
tion

* Housing Reform, pp. 123-129.

already exist and therefore take away some of the existing powers. This of course is undesirable.

§ 155. INSPECTION OF DWELLINGS. The health officer shall cause a periodic inspection¹ to be made of every multiple-dwelling² at least once a year. Such inspection shall include thorough examination of all parts of such multiple-dwelling and the premises connected therewith. The health officer is also hereby empowered to make similar inspections of all dwellings as frequently as may be necessary.

Explana-
tion

NOTE 1: This is a vitally important section. It makes mandatory periodic, systematic inspection of all multiple dwellings at least once a year. This is the only system of inspection worthy of the name. The ideal requirement would be to have such inspection made every three months, but this is not feasible in most cities as the expense involved is too great. Once a year, however, is entirely practicable. For further discussion of this subject see Housing Reform.*

NOTE 2: It should be noted that this requirement calling for a mandatory inspection once a year is limited to multiple dwellings although the health officer is empowered to make similar inspections of *all* dwellings as frequently as may be necessary. Some ingenious persons may claim that the inspection by health officers of multiple dwellings is limited to once a year. Such claim should not be entertained for a moment, in view of the provisions contained in sections 154 and 156 and also the further clear and distinct language employed in section 155. In other words, the health officer *must* inspect every multiple dwelling *at least* once a year and *may* inspect it as often as he finds it necessary or desirable.

§ 156. RIGHT OF ENTRY.¹ The commissioner of public safety, the health officer and all inspectors, officers and employees of the health department, and such other persons² as may be authorized by the health officer, may

* Housing Reform, pp. 134-137.

without fee or hindrance enter, examine and survey all premises, grounds, erections, structures, apartments, dwellings, buildings and every part thereof in the city. The owner or his agent or representative and the lessee and occupant³ of every dwelling and every person having the care and management thereof shall at all reasonable times when required by any of such officers or persons give them free access to such dwellings and premises. The owner of a dwelling and his agents and employees shall have right of access⁴ to such dwelling at reasonable times for the purpose of bringing about a compliance with the provisions of this act or any order issued thereunder.

NOTE 1: Without this definite grant of power health officers have often found themselves estopped from carrying on their work. Explan-
ation

NOTE 2: It should be noted that the right to make inspections is not limited to the employes of the department, but is enjoyed also by "such other persons as may be authorized by the health officer." This will permit the inspector of a housing reform association to make inspections upon the authorization of the health officer. This is important, especially in those communities where it is difficult to secure appropriations from the city treasury and where the health officer is unwilling to enter upon an active and comprehensive scheme of inspection work until its value and necessity has been demonstrated to him. Under this plan the private citizen can be given practically all of the powers of a city employe, so far as inspection is concerned.

NOTE 3: The second sentence of this section places personal responsibility upon every agent, lessee and occupant, so that any person interfering with the free right of entry of persons to whom it is granted would be liable for the penalties which accrue under this act.

NOTE 4: The last sentence in this section is made necessary so as to enable the owner to comply with the orders of the health department. Otherwise he might claim, and justly, that the tenant has possession of the premises and that he (the owner) has no right to go upon them and do what the health depart-

ment has ordered to be done. The specific granting to the owner of this right makes impossible any such situation.

§ 157. INJUNCTION; UNDERTAKING. No preliminary injunction shall be granted against¹ the health department or its officers except by the supreme court or a justice thereof after service of at least THREE days' notice, together with copies of the papers upon which the motion for such injunction is to be made. Whenever such department shall seek any provisional remedy or shall prosecute an appeal it shall not be necessary before obtaining or prosecuting the same to give an undertaking.²

**Explan-
ation**

NOTE 1: In view of the important powers which the health department necessarily exercises for the preservation of the health of the community, it is obviously appropriate that a private individual, owner, or occupant should not be in a position to restrain the health department and prevent its carrying out necessary work by any *ex parte* statement of facts to the court without the health department being represented. This provision makes that situation impossible and insures the health department's receiving notice of any application for an injunction in which it is sought to restrain the department from interfering with a building. This situation is likely to arise chiefly in connection with cases where the health department is seeking to stop the work on a new building because of violation of the law or to prevent the occupancy of a building for similar reasons or to require the vacation of a building where it is unfit for habitation.

NOTE 2: It is obvious that the instances where the health department brings actions and takes appeals from decisions are not in the same category as private litigation, and there is no reason why a responsible agent of the city government should be required to give a bond under such circumstances.

§ 158. LAWS REPEALED.¹ All statutes of the state and all local ordinances so far as inconsistent with the provisions of this act are hereby repealed. Wherever the

provisions of this act are in conflict, either direct or implied, with any provision of any present or future² charter, local regulation or ordinance, except such supplementary ordinances as are authorized by section six of this act, the provisions of this act shall in all cases govern.

NOTE 1: Wherever there is in existence a law or local ordinance and it is desired to definitely repeal it, it should be specifically repealed in this section by inserting at the end thereof: "The provisions of chapter _____ of the laws of _____ are hereby repealed," as the courts have in recent years shown a disinclination to sustain what is known as the "general repealer." Where, however, there is no specific ordinance dealing with the subject matter of this housing act, or any similar state law, but where there are provisions scattered through building codes, sanitary codes, and plumbing codes, applicable not only to dwellings but to all kinds of buildings, as is the usual case, there is no way other than that embodied in this section of repealing such provisions.

Explan-
ation

NOTE 2: Exception may readily be taken to the phrase which refers to "any present or *future* charter, local regulation or ordinance." The wording of this provision should be observed with the greatest care. This is not an attempt, as might appear at first reading, to prevent a future legislature from enacting laws in conflict with or directly repealing the provisions of this act. No such plan could of course succeed, as it would be unconstitutional. One legislature cannot bind a future legislature. All that is attempted here is to indicate the intent of the legislature and to provide for a situation which may easily arise wherein the provisions of some future local charter affecting the city in question, or similarly, of some local ordinance or regulation, may be in conflict with the provisions of this law. The effect of this section, therefore, would be to show that the legislature intended that this law should govern. If this were not the intention of the legislature, so long as this provision of law is contained in this code, it would be necessary for the legislature to specifically repeal or modify it. In other words, this section would make impossible the repeal *by implication* of

important provisions of this code because they might be in conflict with some future local charter or ordinance.

§ 159. WHEN TO TAKE EFFECT. This act shall take effect immediately.¹

**Explan-
ation**

NOTE 1: The desirable thing is to have the act take effect immediately, but this cannot always be done as there will be numerous building operations in contemplation, for many of which contracts may have been made but for which plans had not up to the time of the passage of the act been filed and approved by the local authorities. One is here on the horns of a dilemma. If the act does not take effect promptly, builders and contractors who wish to secure the benefits of building under the more liberal provisions of existing law, will file plans in large quantities for most of the lots in the city, in order to anticipate the new law, and people will thus be permitted to build dwellings under the provisions of the old one for many years to come. If the law has had wide publicity before its enactment, there will be no real hardship in making the act take effect immediately, as architects, owners, and builders will have had ample notice of it in connection with the discussion arising during its passage through the legislature; but where such free public discussion has not been had, it will hardly be practicable in many instances to make the act take effect immediately. These considerations apply, of course, only to those provisions of the act which deal with new buildings and not in any sense to any of the other provisions of the act. Except with regard to new buildings, the act should take effect immediately in every case. If because of the reasons stated it seems wise to meet the views of owners, architects and builders, and permit the filing of a reasonable number of plans for the dwellings contemplated under the provisions of the old law, the following concession is suggested. At the end of this section strike out the period and insert a comma and add the following:

Concession

CONCESSION 1: "except that Articles II and III thereof relative to 'Dwellings Hereafter Erected,' and to 'Altera-

tions,' shall take effect thirty days² after its signature by the governor. Dwellings may be hereafter erected or altered under the laws and ordinances in force and effect on the day this act was passed by the legislature, provided the plans for such dwellings shall have been filed in the office of the superintendent of buildings and shall have been approved in writing by him within thirty days after this act is signed by the governor; such plans shall be bona fide plans suited to the lots for which they are filed, shall show the interior arrangement and grouping of the rooms in the proposed dwelling, and the arrangement of yards and courts. The right to build under the said laws and ordinances shall cease and terminate in the case of any dwelling that has not progressed beyond the second tier of beams³ within one year from the said date."

NOTE 2: Under this concession thirty days' time is allowed owners, builders, and architects to file plans under the old law; that is, thirty days after the governor has signed the act. In many states the governor is allowed a thirty-day period in which to sign bills; in some only ten. In the former case, owners and builders may thus be afforded two months' time in which to adjust themselves to the changed conditions. In any event they will be afforded nearly forty days' time, which should prove ample.

Explana-
tion

NOTE 3: In order that the life of the plans thus filed may not be indefinitely extended, the requirement is added that the building in question must have progressed beyond the second tier of beams within one year after the act takes effect. This will not be deemed an unreasonable provision, as after the plans are filed all bona fide operations should easily get that far within the time specified.

V

WHAT KIND OF HOUSES CAN BE BUILT UNDER
THE MODEL LAW?

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WHAT KIND OF HOUSES CAN BE BUILT UNDER THE MODEL LAW?

THE first question which will be asked in every community where a new housing law is proposed is "What effect will this law have on building operations?" Is it possible to build under the more rigorous requirements of such an act houses which will be commercially profitable and yet at the same time be the kind of house that the public demands?

The first impression which interests adversely affected will seek to convey is that the law is impracticable and that it will stop building operations in that city, that the cost of building will be greatly increased thereby, and that people will not be able to afford the kind of house which the law calls for.

Great emphasis will undoubtedly be laid upon the fact that the requirements of the law are so much more stringent as to the open spaces that have to be left and the restrictions placed upon the percentage of lot that may be occupied, the larger yards required and the more ample courts, that it will not be possible to construct under such a law buildings which will be commercially profitable.

It is vitally important, therefore, that the housing reformer should know at once whether these claims are sound or not. He must be in a position to show to the community that they have no basis in fact and that it will be possible to build under the requirements of the new law houses of all kinds which will be commercially profitable and at the same time will not involve any material increase in rents or in cost of construction.

Is it possible to show this, and how best can this be demonstrated?

The most practicable way to demonstrate it is to draw plans showing the various kinds of buildings that can be built on different

sized lots. It should be borne in mind that this should be demonstrated with regard to two main groups of houses, (I) the detached house and (II) houses built in continuous rows or "terraces."

The conditions which relate to the two classes are naturally very different and the types of plans that can be evolved will differ similarly.

Under each one of these classes it is necessary to consider also what is possible in the way of development in each *kind* of building; namely, the private dwelling, the two-family house, and the multiple dwelling; that is, the tenement house, the flat and the apartment house. It is also necessary to know what developments are possible in all these classes of buildings, of both groups, on lots of different width; namely, on lots 40 feet wide, and on lots 50 feet wide, as well as on lots 25 feet or less in width. We should also know what is possible on lots of varying depth. What may be possible on a lot 150 feet deep may not be practicable on a lot but 60 feet in depth, so one should be in a position to show what can be done on property 60 feet, 100 feet and even 150 and 200 feet deep.

The author has attempted to meet all these questions and to show in the form of outline plans illustrating the style of house and its "disposition" on the lot, the various things that can be done in all of these various circumstances. It should be clearly borne in mind that the plans thus outlined in no sense represent the *only* disposition that can be had, but merely one method of treatment. There are many other alternatives.

No attempt has been made to show the interior arrangement of the rooms in the house. With a building of a certain width and length it is easy for any architect, or in fact for those who are not architects, to adapt the customary plan in each community to such an outline.

Take, for example, Figure 50 showing a detached house on a lot 40 feet wide and 100 feet deep. Under the requirements of this law this house can be built in the center of the plot and can be 30 feet wide by 80 feet deep, with a side yard 5 feet wide on each side of it. It is obvious at a glance that it is possible for the architect to get in a building of such size any disposition or ar-

HOUSES BUILT UNDER MODEL LAW

rangement of the interior that may be desired either for a millionaire's mansion, a two-family house, the humble cottage of the workingman, a cheap tenement with several families on a floor, or a high-grade apartment house.

As an aid to a quick understanding of the various provisions which control the type of house that may be built, the following summary table showing the different points that must be observed is submitted, as this matter must be considered in connection with the provisions with reference to percentage of lot occupied, size of rear yards, size of side yards, size of courts, and distance between buildings where there is more than one building on a lot. All of these requirements except those relating to percentage of lot vary with the height of the building, and two of them, namely, the sizes of rear yards and the percentage of lot requirements, vary also according to the depth of the lot.

SUMMARY TABLE SHOWING OPEN SPACE REQUIREMENTS

HEIGHT OF BUILDING	SIDE YARDS WIDTH	COURTS WIDTH	DISTANCE BETWEEN TWO BUILDINGS	HEIGHT OF BUILDING	YARDS			
					DEPTH OF LOT			
					(UP TO) 60 FT.	(60-105) 100 FT.	(105-155) 150 FT.	(155-205) 200 FT.
1-story	4 ft.	6 ft.	20 ft.	1-story	15 ft.	15 ft.	22 ² ft.	30 ft.
2-story	5 ft.	7 ft.	20 ft.	2-story	15 ft.	20 ft.	30 ft.	40 ft.
3-story	6 ft.	8 ft.	30 ft.	3-story	15 ft.	25 ft.	37 ² ft.	50 ft.
4-story	7 ft.	9 ft.	35 ft.	4-story	18 ft.	30 ft.	45 ft.	60 ft.
5-story	9 ft.	11 ft.	40 ft.	5-story	21 ft.	35 ft.	52 ² ft.	70 ft.
6-story etc.	11 ft.	13 ft.	45 ft.	6-story etc.	24 ft.	40 ft.	60 ft.	80 ft.

PERCENTAGE OF LOT—INTERIOR LOTS

DEPTH OF LOT	PERCENTAGE OF LOT
Up to 60 ft.	70%
60-105 ft.	65%
105-155 ft.	55%
155-205 ft.	50%
Over 205 ft.	40%

Let us consider first the detached type of house. In many cities the general custom is to place such a building in the center

of the plot and leave a side yard on each side of it. The builder of the neighboring house, as a rule, adopts a similar practice so that each person has the advantage of the spaces thus joined together, making the distance between the houses twice as much as it would ordinarily otherwise be. Figures 49-55 (pages 262-268) show the various methods of treatment possible in the case of private dwellings or two-family dwellings not exceeding two stories and attic in height. For such buildings under the provisions of this law a side yard not less than 5 feet in width would have to be left on either side of the building. With a lot 40 feet wide and a side yard 5 feet wide on each side of it, it is possible to build the house 30 feet in width. This gives an ample house for all kinds of buildings. It is sufficiently wide for the mansion of the well-to-do citizen, it is sufficiently wide for a two-family dwelling, one family upstairs and one down, and it is sufficiently wide for a high-class apartment house or a cheap tenement, though of course a larger lot, especially one 50 feet in width, will afford a much better treatment and prove more satisfactory. In laying out property divisions in new portions of a city it would be far better to make the lot units 50 feet in width, especially in high-class residence districts, but lots 40 feet in width will give very satisfactory results.

No attempt has been made to show the treatment possible on lots 50 feet in width, as it is at once obvious that all the things that are possible on the 40-foot lot are possible in this case as well, only the owner has 10 extra feet in width to dispose of which he can either use in making his building 40 feet wide instead of 30 feet, or can enlarge his side yards, as he pleases. So far as the law is concerned, the conditions which govern would make no change in the disposition of a lot of this greater width. The plans, therefore, which are submitted for the 40-foot lot should be deemed to apply equally to the 50-foot lot.

Seven different treatments are offered for consideration. It is shown first (Figure 49) what is possible on a lot of very narrow depth, say even not more than 60 feet in depth. There are such lots in many cities, "tail-enders" as they are called. Even with this small plot it is possible to build an excellent type of house; namely, a house 30 feet by 45 feet, built up to the line in front,

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with a side yard on either side and with a rear yard 15 feet in depth, the minimum required by the law. A building 30 feet by 45 feet will give a very attractive house in the case of both a private dwelling and a two-family house and it will be even possible to build a satisfactory tenement house on this plot.

When we take the ordinary type of lot which prevails in most cities, the lot 100 feet in depth, it is at once seen how easy it is to develop such property advantageously. Here two alternatives are presented. In the first case (Figure 50) but one building is shown on the plot. Under this disposition it would be possible to build a house 30 feet wide and 80 feet deep with a back yard 20 feet in depth, the minimum required by law, and with a side yard on each side of the house 5 feet in width. Few people would wish to build a private dwelling 80 feet deep. There would also be few cases where it would be desired to build even a two-family dwelling that depth, though it might be advantageous in building an apartment house or tenement house to utilize this larger space. The disposition which would be had most generally would be that shown in Figure 51, where a garage is placed on the rear of the lot. Here, as will be seen, it is possible to have the house 30 feet by 55 feet, to have a rear yard 20 feet in depth, the minimum required by the law, and then at the rear a garage 25 feet by 30 feet, leaving a space of 10 feet on one side of the garage, at the rear, for a driveway if that is desired.

An alternative to this plan not shown in any of the diagrams would be in cases where no garage is desired and where a front yard is desired, to set back the house, leaving a front yard 25 feet in depth and the full width of the plot. Under this arrangement we should have a house as in Figure 51, 30 by 55 feet, a front yard 25 by 40 feet, a rear yard 20 by 40 feet and two side yards each 5 feet in width and extending along the entire depth of the house. This would give a very desirable house both in the case of a private dwelling and a two-family dwelling.

When we come to lots of greater depth, namely, the lot 150 feet deep, it is at once obvious that even more advantageous treatment from the point of view of the use of the property is afforded. Figure 52 shows that with such a lot it is possible to build a house 30 feet by 85 feet in depth, to have a garage at the rear 25 feet by

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30 feet in size and to have a 40-foot yard between them. Or instead of this, the depth of the house can be cut down if it is desired to have a front yard and the building set back from the street 25 feet or whatever amount is desired (as shown in Figure 53) and the house reduced to 60 feet in depth, which would be a deeper house than would naturally be desired either for a private dwelling or two-family house.

Similarly with regard to lots 200 feet deep. Figure 54 shows that with such a lot we could build our house 30 feet by 108 feet, have a garage at the rear, and leave a 67-foot yard between the two, a yard 27 feet more than the law would require. Or instead of this, a front yard could be left in front, say 30 feet in depth, the house be made 30 feet by 95 feet, the garage 25 feet by 30 feet, with a yard 50 feet deep between the house and garage (Figure 55).

It is evident from a study of these plans that there is not the slightest difficulty from any point of view, under the provisions of the Model Law, in developing a plot 40 feet in width with a detached house which will be commercially profitable and at the same time in accordance with the desires of the people who are to live in it and with the habits of the community.

This is true so far as the two-story and attic building is concerned and applies to all classes of buildings, the private dwelling, the two-family dwelling, and to the multiple dwelling; namely, the tenement house, the flat, and the apartment house.

But, it may be asked, although this can be done with a building two stories and attic in height, is it feasible with the three-story and attic building, the type which is more common in many of our cities? The answer is unquestionably, Yes. The following seven diagrams (Figures 56-62) show that even in this case it is easily practicable to build every class of house desired on a lot unit of 40 feet in width, on lots of varying depth, namely, 60 feet, 100 feet, 150 feet, and 200 feet, and have the buildings three stories and attic in height. The types of houses that can be built are practically identical with the houses that are possible in the plans which have been presented in the case of the two-story and attic house (Figures 49-55). The only difference is that in this case the side yards must be 6 feet wide instead of 5 feet wide.

HOUSES BUILT UNDER MODEL LAW

This means that the house can be but 28 feet in width instead of 30 feet. This is not at all too narrow to give satisfactory results even in the case of a private dwelling or two-family house or even a multiple dwelling.

Taking up these plans in detail and commenting briefly on them we find the following possibilities for the three-story and attic house on the 40-foot lot.

On a 60-foot lot we may have a house 28 feet by 45 feet with a back yard 15 feet deep (Figure 56); on a lot 100 feet deep we may have a house 28 feet by 75 feet with a back yard 25 feet in depth, the minimum (Figure 57); or if we do not desire a house as deep as this, as this is deeper than would be generally desired in the case of private dwellings and two-family houses at all events, it would be possible to have a garage at the rear of the lot 25 feet by 30 feet and to have our house 28 feet by 50 feet, with a 25-foot yard between them, the minimum depth (Figure 58); or if no garage is desired and it is wished to set back the house from the building line and have a front yard, it would be possible to have a front yard 25 feet by 40 feet, a house 28 feet by 50 feet, and a back yard of 25 feet. On lots 150 feet deep it is possible to have a house 28 feet by 85 feet, with a garage 25 feet by 30 feet at the rear and a 40-foot yard between the two, slightly more than the minimum (Figure 59); or if a house of this great depth is not desired, it is possible to set back the house from the building line 25 feet, have a front yard of that depth, a building 28 feet by 60 feet, a garage at the rear 25 feet by 30 feet, and a 40-foot yard between the two buildings (Figure 60). With a lot 200 feet in depth we may obtain a house 28 feet by 116 feet, a garage at the rear 25 feet by 30 feet, with a 59-foot yard between the two, 9 feet more than the minimum (Figure 61). There is probably no instance where anyone would desire a house of this excessive depth; not even in the case of apartment houses or tenement houses, and the more usual treatment would be to have a large front yard instead of extending the building back so far upon the lot. Under such a treatment we could have a front yard 30 feet by 40 feet, a house 28 feet by 95 feet, a garage at the rear 25 feet by 30 feet, and a rear yard between the two of 50 feet, the minimum (Figure 62).

It is obvious from a consideration of these plans that in the

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case of the three-story and attic detached house on a 40-foot lot, no matter what the depth of the lot may be, there is not the slightest difficulty in building a house that will be a commercial success and the kind of house that the people want.

If these results affording the most generous use of space from the point of view of the builder and owner are feasible on lots 40 feet in width, it is obvious at once that with a larger lot unit, that is, 50 feet or more, it will be possible to obtain even more satisfactory results. No attempt has been made to show what would be possible with houses that are intended to be four stories in height. A four-story private dwelling is seldom built and should be discouraged. A four-story two-family dwelling is unknown. When it comes to apartment houses and tenement houses the four-story house will appear more frequently. The same method of treatment is possible with the four-story house, except that the side yards would have to be 7 feet wide instead of 6 feet and the yards would have to be of a greater depth, depending upon the depth of the lot as well as upon the height of the building.

What has been said shows conclusively that the law will work in practice on lots 40 feet or more in width, but it may be asked "What is to be done with the small lot—lots but 30 or 25 feet wide?" Is it possible to build houses on such lots that will be commercially successful and yet will comply with the law?

Here the answer is not so easy. It must be frankly admitted that it is not possible on a 25-foot lot to place a detached house in the center of the plot and leave an adequate side yard on *each* side of it. In the case of a two-story building each side yard would have to be 5 feet wide. This would leave but 15 feet for the house, which would not be wide enough, except in the case of workingmen's houses of a particular type.

Similarly with three-story buildings, each side yard would have to be 6 feet wide, leaving but 13 feet for the building. One could not build a building 13 feet wide that would be practicable, though it is true there are hundreds of thousands of buildings in the city of Philadelphia which do not exceed 15 feet in width.

We must however at once dismiss as impracticable the idea of building houses 13 and 14 feet wide. The people of most cities would so consider it.

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Does this mean, therefore, that it will not be possible to build on such a plot a house that will be commercially profitable and at the same time meet the desires of the people?

There is no doubt that a house of this kind can be built, but it will involve some changes in the habits of the people in a number of cities. In many cities it is the habit to build the houses in the middle of the lot, devoting the space that is left on either side to use as a side yard. In some cities this is not the custom but instead the custom is to build one side of the house up to the lot line and to leave the space that is left for side yards entirely on the other side. Where this is done and houses are built on this plan under a tacit agreement by the adjacent property owners, often very excellent results are obtained.

This is the only type of *detached* dwelling that is possible on a lot 25 feet wide; namely, a single side yard on one side of the building and the house built up to the lot line on the other side. This would give on a 25-foot lot, in the case of two-story houses, a house 20 feet wide, and in the case of three-story and attic buildings a house 19 feet wide with a side yard 5 feet wide in the first case and a side yard 6 feet wide in the second. Figures 63-69 show the kinds of houses that would be possible in the case of a three-story and attic building on lots of various depths; namely, 60, 100, 150, and 200 feet deep. In each case a side yard 6 feet wide is left on one side of the building and the other side of the plot is built up to the lot line, giving in every instance houses 19 feet in width. This will make a very good house. There will be no practical difficulties so far as the law is concerned in securing adequate light and ventilation for the various rooms. In most cases the majority of the rooms will front on the street and yard. The other rooms will face on the side yard and the "dead end" of the house will be used for the hallway. It does not mean necessarily that this hallway will be dark, as it will be possible to open supplementary windows in the dead wall where the owner of the adjoining property leaves a side yard on that side following a general plan, though it would not be lawful to have any *rooms* get their sole light and ventilation from the adjoining property.

Commenting briefly on the plans we note the following possibilities:

A MODEL HOUSING LAW

On a lot 60 feet deep we can get a house 19 feet by 45 feet with a 15-foot rear yard (Figure 63); on a 100-foot lot we would get a house 19 feet by 75 feet with a 25-foot yard (Figure 64); or a garage at the rear 20 feet by 25 feet, a house 19 feet by 52 feet and a 28-foot yard between them, 3 feet more than the minimum (Figure 65). In the case of lots 150 feet deep it would be possible to have a house 19 feet by 76 feet, with a garage at the rear 25 feet by 25 feet, and a rear yard between the two 49 feet in depth, 12 feet more than the minimum (Figure 66); or if it is desired to have a front yard on such a lot we could have a front yard 25 feet by 25 feet, a house 19 feet by 60 feet, a garage at the rear 25 feet by 25 feet and a 40-foot yard between them (Figure 67). In the case of lots 200 feet in depth we could build the house 19 feet by 98 feet, have a garage at the rear 25 feet by 25 feet and leave a yard of 77 feet between the two, 27 feet more than the minimum (Figure 68); or if instead it was desired to have a front yard, we could have a front yard 30 feet by 25 feet, a house 19 feet by 95 feet, a garage at the rear 25 feet by 25 feet and a 50-foot yard between the two (Figure 69).

When it comes to lots less than 25 feet in width it is clearly impracticable to build a detached house on such a lot, and the only thing to do there is to build houses in rows or terraces; that is, to build them right up to the line on either side. This is so, irrespective of the provisions of this law. It would be most unwise to build a detached house on such a lot, as it would be impossible to get an adequate open space on either side of it that would furnish sufficient light and which would not be simply a narrow, dark pocket, unsightly and a gathering place for waste material.

In many cases a more advantageous treatment even on the 25-foot lot would be had by this method than could be had with the detached house. In other words, it will be found advantageous to utilize the full frontage of the lot and to build the front at least up to the lot line on either side. This is, of course, the prevailing method of building in the case of apartment houses, flats, and tenements in those portions of a city where land values are high and where street frontage is valuable. It would also be the most advantageous method to employ in the case of two-family houses and even private dwellings in many parts of large cities.

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In the large city, except on the outskirts, it is not feasible from the commercial point of view to build workingmen's houses or houses for people of moderate means on any other basis. To utilize all of the lot front is the only feasible way.

What kind of houses, it may be asked, can be built on 25-foot lots where houses are built in this way without any side yards? Figures 70-76 show what is possible under these circumstances.

The type of house that is there shown is suitable for all classes of dwellings, for the private house, the two-family house and the apartment house. Here especially it should be noted that various kinds of treatment other than those presented are possible. The plans simply show the dispositions which have suggested themselves to the author as feasible and as giving kinds of buildings which would be attractive to live in and commercially successful.

Looking at these plans and commenting briefly upon them we note the following:

On a 60-foot lot it would be possible to build a house 25 feet by 42 feet, leaving a yard of 18 feet at the rear. Such a house, however, could not exceed two rooms in depth, as the rooms would have to open either on the street or on the yard. It would probably not be advantageous, therefore, to build the house as deep as this, but to build it not more than 40 feet deep, leaving a 20-foot yard. But it would be lawful to build as deep as 42 feet if a plan could be developed that the owner would find it advantageous to use (Figure 70).

On a 100-foot lot it would be possible to build a house 25 feet wide by 68 feet deep with an inner lot line court on one side 10 feet by 20 feet and a back yard 32 feet in depth at the rear of the building, 7 feet better than the minimum. This would give a very excellent layout in the case of either a two-family house or a multiple dwelling, as each section of the building between the street and the court, and between the yard and the court, would be about 24 feet in depth, thus permitting the section to be built two rooms deep. Under such an arrangement it would be very easy to get six or seven rooms and bath on each floor after making the necessary allowance for hallways and similar spaces (Figure 71); or if a different treatment were desired and it was felt essential to have

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a garage at the rear, we might have the following: a house 25 feet by 52 feet with an outer court on one side 10 feet wide by 30 feet long, a rear yard of 28 feet the full width of the lot, and a garage at the rear 20 feet by 25 feet (Figure 72). This would permit an interior arrangement of the house by which five or six rooms and bath could be obtained for each floor, though of course a more advantageous arrangement would be secured by the previous layout.

In the case of a lot 150 feet deep it would be possible to get a house 25 feet wide by 78 feet deep, with a garage at the rear 20 feet by 25 feet and a yard between the two 52 feet in depth, 15 feet more than the minimum (Figure 73). This treatment would involve in the layout an inner court on each side 10 feet by 20 feet with a hallway between the two courts. It would be thus possible to obtain in the front section of the building four rooms each 12 feet by 14 feet in size and similar treatment in the rear section, making 8 rooms per floor. This would make an excellent arrangement either in the case of a two-family dwelling or an apartment house.

If instead of this plan it were desired to have a front yard, it would be possible to arrange the building on the lot so as to leave a front yard of 20 feet in depth, have the building 70 feet in depth, a garage at the rear 20 feet by 25 feet, and a rear yard of 40 feet between the two, $2\frac{1}{2}$ feet more than the minimum (Figure 74). This would involve the use of a side inner court 10 feet wide by 20 feet long. Under this plan it would be possible to get eight or more rooms per floor with the hall running along the dead end of the building.

With a lot 200 feet deep a building 25 feet by 95 feet could be obtained, with a garage at the rear 25 feet by 25 feet and a rear yard between the two buildings of 80 feet, 30 feet more than the minimum (Figure 75). This would involve the use of two inner side courts, each 10 feet wide and 25 feet long, with the hallway of the building located between the two courts, making a treatment by which in the front section of the building it would be possible to obtain four rooms each 12 feet by 17 feet in size and a similar arrangement at the rear, thus making eight rooms per floor; or if it was desired to utilize a front yard and set the building

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back, it would be possible to have a front yard of 30 feet by 25 feet, with the building necessarily the same as before; namely, 25 feet by 95 feet, with eight rooms per floor, a garage at the rear 25 feet by 25 feet, and a rear yard of 50 feet between them, the minimum (Figure 76).

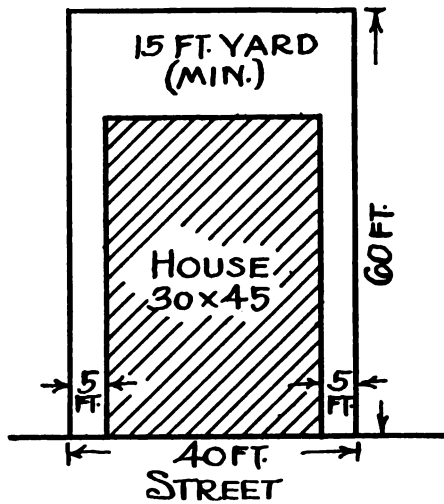
It is obvious from a study of these plans that even on lots of this narrow width of 25 feet it is possible, in the case of houses built in continuous rows, both private houses, two-family houses, and multiple dwellings, to build houses that would be unquestionably profitable from a commercial point of view and would give an advantageous arrangement of the rooms both from the point of view of light and ventilation and also of convenience of arrangement, as well as from the points of view of comfort and what people are accustomed to. It probably will mean, however, that the stereotyped kinds of buildings which are in existence in many cities will have to be changed somewhat and there will therefore at once be opposition. The builder who is building from a plan that he bought from an architect ten years ago will object to going to an architect now to have a new plan made. He will be wedded to the kind of house that he has been building and will object to any change. Similarly, the architect may be slow to see the opportunities that exist and may not have sufficient inventive faculty to lay out types of plans that will produce the best results, but such change is involved in any law which makes for progress. If the present types of houses were satisfactory no law would be necessary.

When it comes to building houses in continuous rows on lots of a greater width than 25 feet of course more advantageous treatment can be obtained.

To sum up: On lots 40 feet or over in width detached houses on any depth of lot can be built under this law which will be commercially profitable, private dwellings, two-family dwellings, and multiple dwellings of all kinds.

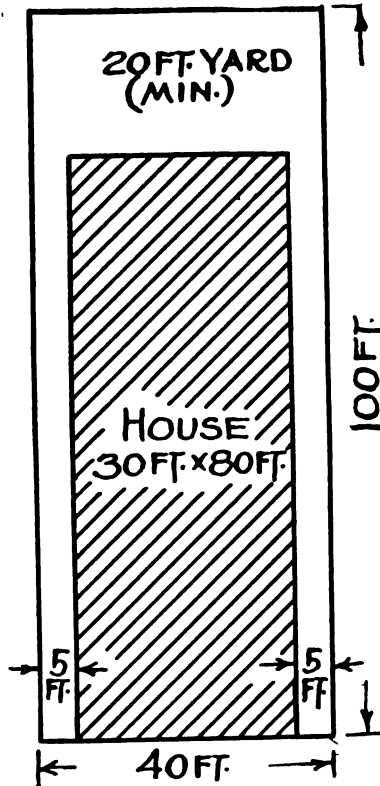
On lots of less than 40 feet in width the detached house is not so advantageous, though it is still possible on lots as narrow as 25 feet in width. On anything less than this, however, the detached house is impracticable, and houses built in rows or terraces are the only thing to consider.

FIGURE 49
TWO-STORY AND ATTIC



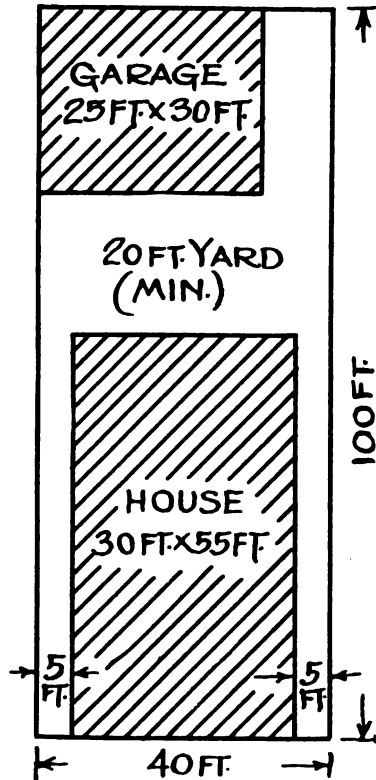
Detached Houses on 40 ft. Lots
Lot 60 ft. deep
Occupies 56 per cent of lot
Legal maximum 70 per cent of lot

FIGURE 50
TWO-STORY AND ATTIC



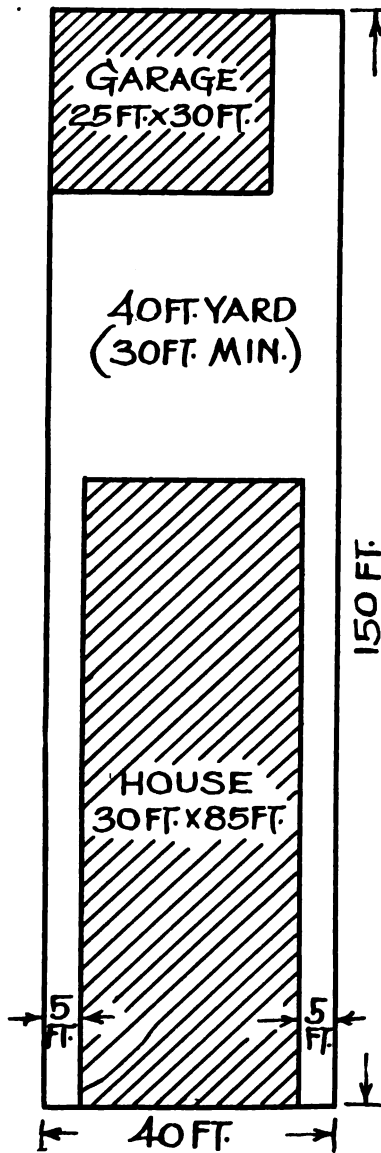
Detached Houses on 40 ft. Lots
Lot 100 ft. deep
Occupies 60 per cent of lot
Legal maximum 60 per cent of lot

FIGURE 51
TWO-STORY AND ATTIC



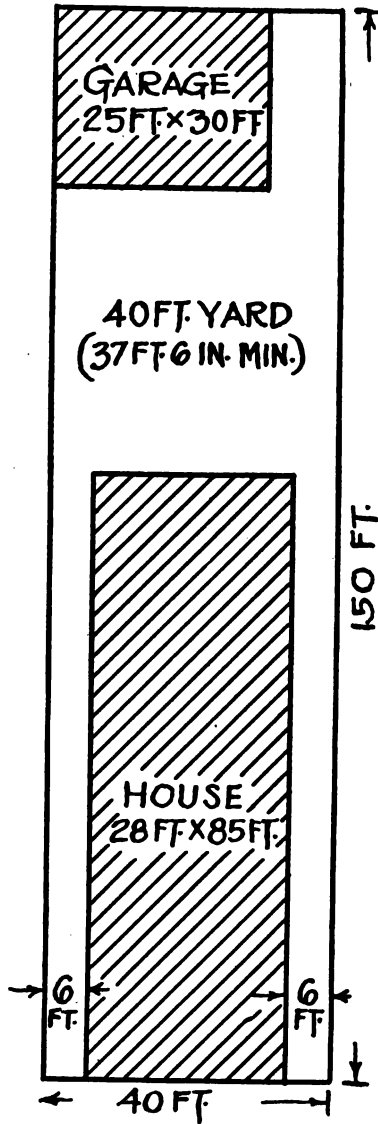
Detached Houses on 40 ft. Lots
 Lot 100 ft. deep
 Occupies 60 per cent of lot
 Legal maximum 60 per cent of lot
 Alternative to Figure 50 with garage

FIGURE 52
TWO-STORY AND ATTIC



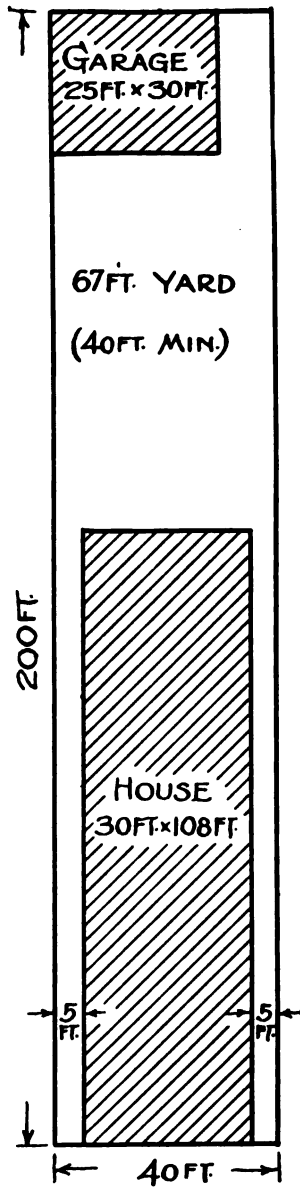
Detached Houses on 40 ft. Lots
 Lot 150 ft. deep
 Occupies 55 per cent of lot
 Legal maximum 55 per cent of lot

FIGURE 59
THREE-STORY AND ATTIC



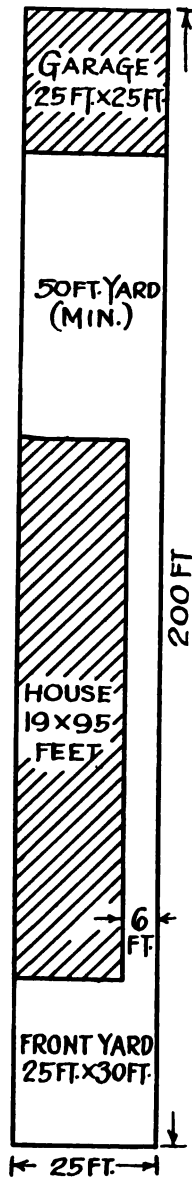
Detached Houses on 40 ft. Lots
Lot 150 ft. deep
Occupies 50 per cent of lot
Legal maximum 55 per cent of lot

FIGURE 54
TWO-STORY AND ATTIC



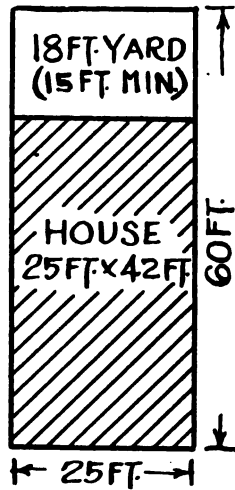
Detached Houses on 40 ft. Lots
Lot 200 ft. deep
Occupies 50 per cent of lot
Legal maximum 50 per cent of lot

FIGURE 69
THREE-STORY AND ATTIC



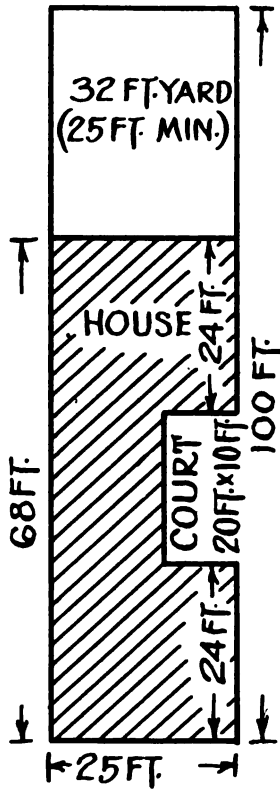
Detached Houses on 25 ft. Lots
 Lot 200 ft. deep
 Occupies 48+ per cent of lot
 Legal maximum 50 per cent of lot
 Alternative to Figure 68 with front setback
 282

FIGURE 70
THREE-STORY AND ATTIC



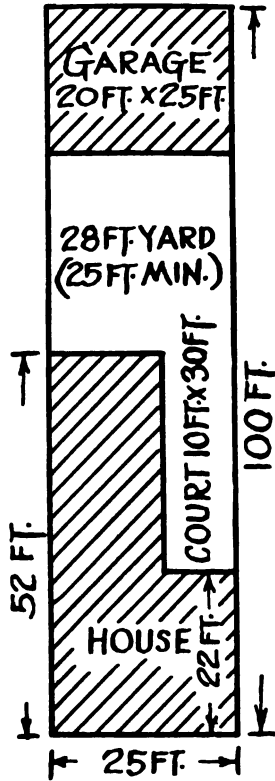
Continuous Rows or Terraces on 25 ft. Lots
 Lot 60 ft. deep
 Occupies 70 per cent of lot
 Legal maximum 70 per cent of lot

FIGURE 71
THREE-STORY AND ATTIC



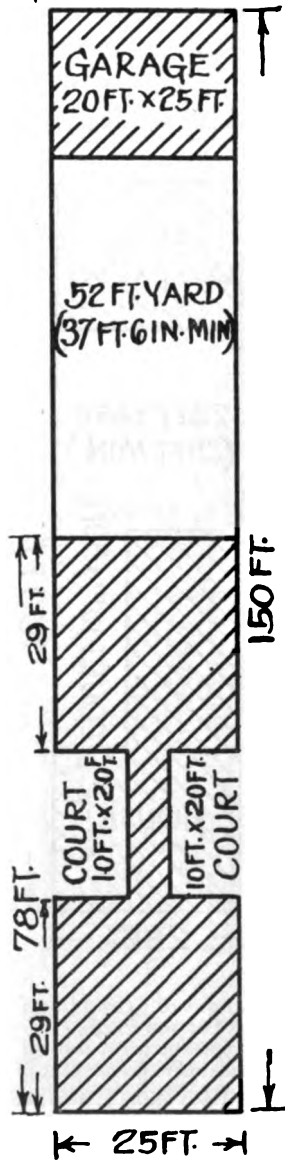
Continuous Rows or Terraces on 25 ft. Lots
 Lot 100 ft. deep
 Occupies 60 per cent of lot
 Legal maximum 60 per cent of lot

FIGURE 72
THREE-STORY AND ATTIC



Continuous Rows or Terraces on 25 ft. lots
 Lot 100 ft. deep
 Occupies 60 per cent of lot
 Legal maximum 60 per cent of lot
 Alternative to Figure 71 with garage

FIGURE 73
THREE-STORY AND ATTIC



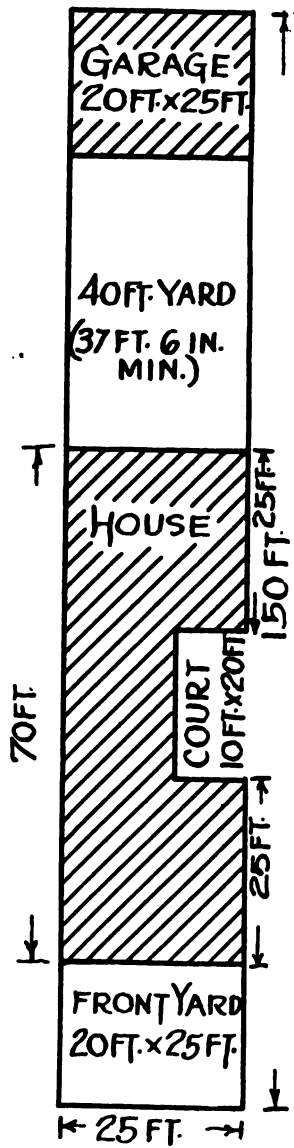
Continuous Rows or Terraces on 25 ft. Lots

Lot 150 ft. deep

Occupies 55 per cent of lot

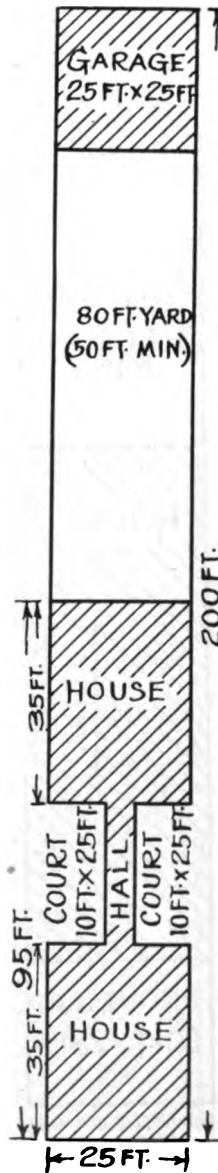
Legal maximum 55 per cent of lot

FIGURE 74
THREE-STORY AND ATTIC



Continuous Rows or Terraces on 25 ft. Lots
 Lot 150 ft. deep
 Occupies 55 per cent of lot
 Legal maximum 55 per cent of lot
 Alternative to Figure 73 with front setback

FIGURE 75
THREE-STORY AND ATTIC



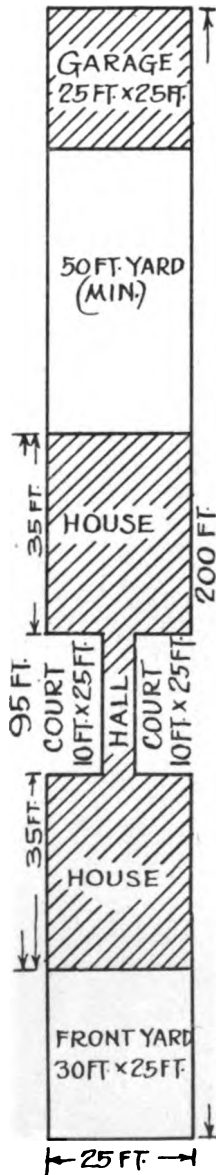
Continuous Rows or Terraces on 25 ft. lots

Lot 200 ft. deep

Occupies 50 per cent of lot

Legal maximum 50 per cent of lot

FIGURE 76
THREE-STORY AND ATTIC



Continuous Rows or Terraces on 25 ft. Lots
 Lot 200 ft. deep
 Occupies 50 per cent of lot
 Legal maximum 50 per cent of lot
 Alternative to Figure 75 with front setback

VI

A MODEL TENEMENT HOUSE LAW

VI

A MODEL TENEMENT HOUSE LAW

THERE may be some communities in which it will not seem feasible to undertake the enactment of a general housing law dealing with all classes of residence buildings, because of fear of the opposition which such a law may create.

Where this situation exists and those interested in housing reform desire to proceed along the line of least resistance and limit their activities to the more restricted field of tenement house reform, it will be necessary to adapt the Model Housing Law to this situation.

This can readily be done by making the following changes:

CHANGES NECESSARY IF THE MODEL HOUSING LAW IS TO BE MADE A MODEL TENEMENT HOUSE LAW

VARIATION 1: Title—Change the title to read “An act in relation to tenement houses in cities of the **FIRST** class.” **Variation**

NOTE: The same variations discussed under the title in the Model Housing Law will apply equally here.

VARIATION 2: In section 1 change “housing law” to “tenement house law.”

VARIATION 3: Strike out subdivisions (1), (2), (3) and (4) of section 2 and insert in place thereof the following:

“§ 2 (1). Tenement house. A “tenement house¹” is any house or building which is occupied, in whole or in part, as the home or residence of **TWO²** families or more living

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independently of each other³ and doing their cooking⁴ upon the premises, and includes apartment-houses and flat-houses and all other houses similarly occupied, by whatever name known."

Explanation

NOTE 1: This definition includes all classes of "tenement houses" containing two families or more, whether popularly known as "tenements," "flats," or "apartment houses." Pressure will be brought to exclude from the provisions of a tenement law the better grade flats and apartment houses. This should not be done. There are few provisions of the law which apply to the cheapest tenement which should not equally apply to the highest class apartment house. The rich as well as the poor are entitled to light and air, proper sanitation, privacy and reasonable fire protection. Moreover, the "apartments" of the rich of to-day are the "tenements" of the poor of to-morrow. There is also no way of drawing a legal distinction between these various classes of tenements which will be sound and which will not result in evasion and nullification of the statute. In the discussion of this question with those who urge this differentiation, it will be illuminating and will clarify the issue to ask them to point out the provisions of the law which they think should not apply to "apartment houses." It will be found that they are unable to specify any which experience has not shown to be necessary.

NOTE 2: The question of whether the standard should be set at "two families or more" or "three families or more" is a difficult one. The recent tendency has been to make two families the standard, but this has been prior to the existence of a housing law. There are some two-family houses that are to all intents and purposes private houses; namely, the type known as the "double house" where the families are side by side with a party wall or thin partition between each part of the house, and with a common roof and cellar. The other type, the more common one, with one family upstairs and one downstairs, is nothing more nor less than a flat, and has all the features of the flat except the common entrance. It is entirely reasonable to subject it to the

same regulations. The effect of so doing, however, may be to discourage the erection of two-family houses and encourage the erection of "three-deckers," the three-story house with one family on each floor; this would be unfortunate as the two-family house is greatly preferable and next to the private dwelling the best type of house to encourage. It is also an increasingly popular type in many communities, and deservedly so, as it is both convenient and economical and when properly built with sufficient space on all sides so as to afford ample light and air, is an excellent type of habitation. As a rule, it has the additional advantage that the owner lives in one flat, thus insuring better care of the premises. No city should make the mistake of setting its standard at "four families or more." One thing is clear beyond any question from the experience of the past fifty years, that when as many as three families live in one building, that building needs regulation.

NOTE 3: There has purposely been omitted from this definition the feature of common use of certain parts of the building which had heretofore been incorporated in most of the definitions of a tenement house to be found in the different tenement house laws of the country. This was a feature of the first tenement house law enacted in America, namely, that of New York City enacted in 1867, and up to a few years ago had proved satisfactory; but recently ingenious architects and lawyers have found this a means of evading the law's requirements. In the case of a three-decker, for instance, by the mere expedient of providing a separate entrance for the family on the entrance floor, and giving them no common right in the "halls, stairways, yard, cellar or water-closets," the building ceased to be a tenement house. What constitutes a building a tenement house is primarily its occupancy by several families, and the use in common of certain parts of it is but a detail of that occupancy.

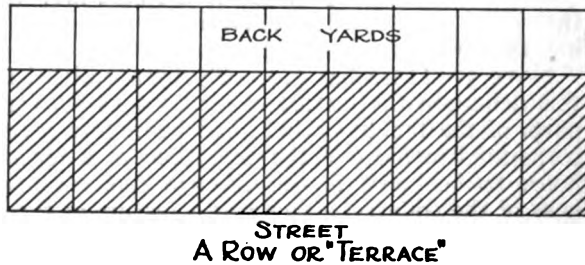
NOTE 4: It should be fully realized that "kitchenettes" and apartment hotels, as well as lodging houses, will all escape regulation under this definition. (The phrase "doing their cooking on the premises" marks the important point.) This is neither logical nor desirable. But there is no practicable way of bring-

A MODEL HOUSING LAW

ing these buildings under the law without at the same time including the ordinary hotel. If this is desired, the satisfactory way to accomplish it is to enact a housing law rather than a tenement house law.

NOTE 5: In many cities the worst housing conditions will remain unremedied by a mere "tenement house law," as in the small shacks and dilapidated cottages of the poor will be found the worst evils. One or two cities and some states have sought to include such houses under a tenement house law, having some of its provisions apply to certain kinds of dwellings. Three types of such single-family dwellings are to be differentiated; namely,

- (1) Single-family houses built in attached rows, known frequently as "terraces" (Figure 77);



NINE SEPARATE HOUSES
FIGURE 77

- (2) Detached houses with narrow space between each house (Figure 78);
- (3) Several single-family houses placed on the same lot in various positions, having common use of the yards, courts, and often of the water supply, privies, and so forth (Figure 79).

There is no really satisfactory way of dealing with these conditions other than through the enactment of a complete housing law.

NOTE 6: The phrases "or portion thereof," and "is rented, leased, let or hired out to be occupied," as well as "or is intended, arranged or designed to be occupied" heretofore found in the definition of a tenement house law, in most statutes, are here purposely omitted for the sake of clarity and brevity.

MODEL TENEMENT HOUSE LAW

The points involved have been fully covered in subdivision (20) of section 2.

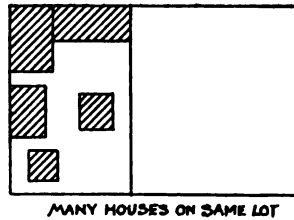
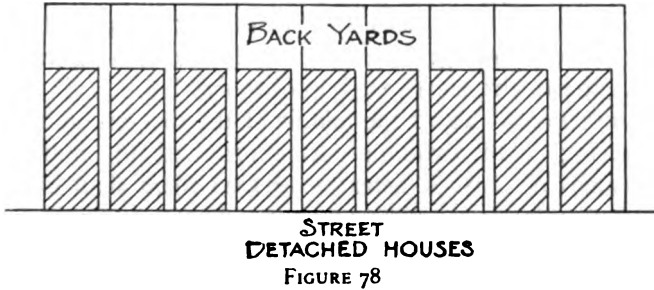


FIGURE 79

VARIATION 4: Omit subsection (c) of subdivision (13) **Variation** of section 2.

VARIATION 5: Re-number the subdivisions of section 2 to correspond with these changes.

VARIATION 6: Omit section 9.

VARIATION 7: Omit section 11.

VARIATION 8: In section 29 omit the last sentence.

VARIATION 9: In section 31 omit the phrase "In multiple-dwellings of Class A;"

VARIATION 10: In section 35 omit the last sentence.

VARIATION 11: In section 45 omit the following:

"Nothing in this section contained shall be construed so as to prohibit a general toilet-room containing several water-closet compartments separated from each other by dwarf partitions provided such toilet-room is adequately lighted and ventilated to the outer air as above provided, and that such water-closets are supplemental to the water-

A MODEL HOUSING LAW

closet accommodations required by other provisions of this section for the tenants of the said house."

In section 45, at the end of the first sentence, after the words "separate water-closet," strike out the period and insert the following: "for each family and located within each apartment, suite or group of rooms."

In section 45 about the middle of the section, omit the following: "In two-family-dwellings and in multiple-dwellings of Class A hereafter erected there shall be for each family a separate water-closet constructed and arranged as above provided and located within each apartment, suite or group of rooms. In multiple-dwellings of Class B hereafter erected there shall be provided at least one water-closet for every fifteen occupants or fraction thereof."

VARIATION 12: In section 51 omit the following:

"In multiple-dwellings of Class B the second way of egress shall be directly accessible from a public hall."

VARIATION 13: In section 93 omit the last sentence.

VARIATION 14: In section 98 omit the following:

"In two-family-dwellings and multiple-dwellings of Class A" and begin the word "there" with a capital.

VARIATION 15: In section 101 omit the following: "and in the case of a private-dwelling, the occupant thereof," Also omit the following: "or in the case of a private-dwelling, the occupant,"

VARIATION 16: In section 105 omit the following: "and in the case of a private-dwelling, the occupant,"

VARIATION 17: In section 111 omit the words: "Except in multiple-dwellings of Class B," and begin the word "no" with a capital. In section 111 omit the last sentence.

VARIATION 18: Omit section 145.

VARIATION 19: In section 155 omit the last sentence.

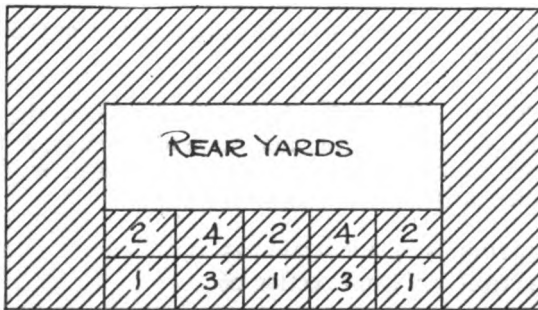
VARIATION 20: Change the words "dwelling," "private-dwelling," "two-family-dwelling," "multiple-dwelling," "multiple-dwelling of Class A," wherever they occur to "tenement house."

VII
AN IDEAL HOUSING LAW

VII

AN IDEAL HOUSING LAW

AN ideal situation as to the light and ventilation of all future dwellings would result if we could adopt in America the practice which is quite general in Great Britain; namely, of having no buildings used for residence purposes exceed two rooms in depth, each group of rooms thus extending from the street to the yard, a generous yard being left at the back of the building. Under this plan every room and public hall, in fact, every part of the building, would open either on the street or on this large back yard. Such conditions are ideal. It would mean that we would have no courts or air-shafts or similar make-shifts for direct light and air.



TWO ROOMS DEEP ~ NO COURTS

FIGURE 80

Before this can be brought about in America, however, we shall have to make radical changes in our property divisions. Such a plan requires that property shall be divided into shallow lots and that the present deep lot

A MODEL HOUSING LAW

which prevails in America shall cease to exist. Before this state of affairs is likely to be reached there will undoubtedly be many years of effort in the city planning movement.

This book, however, would not be complete if it did not contain a scheme for adapting the Model Housing Law to such conditions. To bring about these ideal conditions but few changes in the Model Housing Law would have to be made. They are as follows:

Variation

VARIATION 1: Omit subdivision (8) of section 2, and re-number the subsequent subdivisions accordingly.

VARIATION 2: In subdivision (16) of section 2 omit the word "courts."

VARIATION 3: In subdivision (18) of section 2 omit the sentence: "Court walls are exterior walls."

VARIATION 4: Omit section 24 and substitute the following:

"§ 24. Courts prohibited. There shall be no court or shaft or other unoccupied space on the lot other than a yard. No dwelling hereafter erected shall exceed two rooms in depth from the street to the yard. Each apartment, group or suite of rooms shall extend from the street to the yard."

Explanation

NOTE 1: The writer has no illusions as to the desirability of such a provision, nor, sad to relate, as to the utter unconstitutionality of such a plan so far as America is concerned.

Variation

VARIATION 5: Omit section 25.

VARIATION 6: Omit section 26.

VARIATION 7: Omit section 27.

VARIATION 8: In section 28 omit the words "courts or."

VARIATION 9: In section 29 omit the words "or court."

VARIATION 10: In section 35 omit the words "or court."

VARIATION 11: In section 36 omit the words "or court."

VARIATION 12: In section 45 omit the words "or court."

VARIATION 13: In section 124 omit the words "or court"; also omit the words "and twenty-four."

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